

Training anSwitch V7

ANCALL FOR MS TEAMS CLIENT

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INTRODUCTION & MOTIVATION

This training covers the topics:

- ▶ Introduction to the anCall feature
- ▶ Creation and configuring the customer anCall settings in MS Teams
- ▶ Configuring the customer PBX in the anSwitch V7
- ▶ User installation and basic configurations of the anCall plugin

After this training, the trainee is enabled:

- ▶ To advise the customer about needed requirements
- ▶ To advise the MS Teams administrative personnel
- ▶ To enable and configure the anCall feature on the anSwitch V7
- ▶ To advise users about the installation of the anCall plugin in MS Teams



*IT'S NOT
MAGIC
IT'S "KNOW
HOW"*

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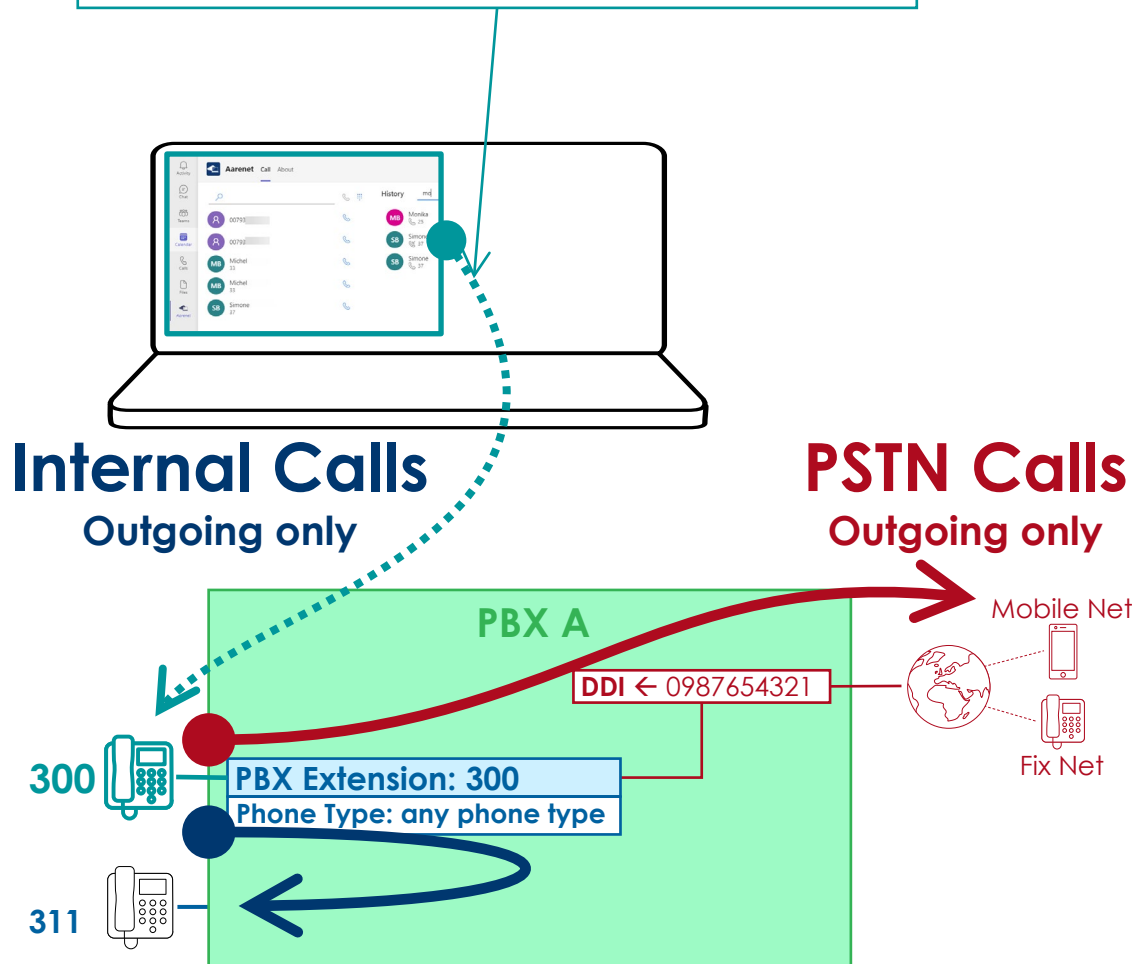
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1 OVERVIEW OF ANCALL FOR MS TEAMS

OVERVIEW OF FEATURE ANCALL FOR MS TEAMS

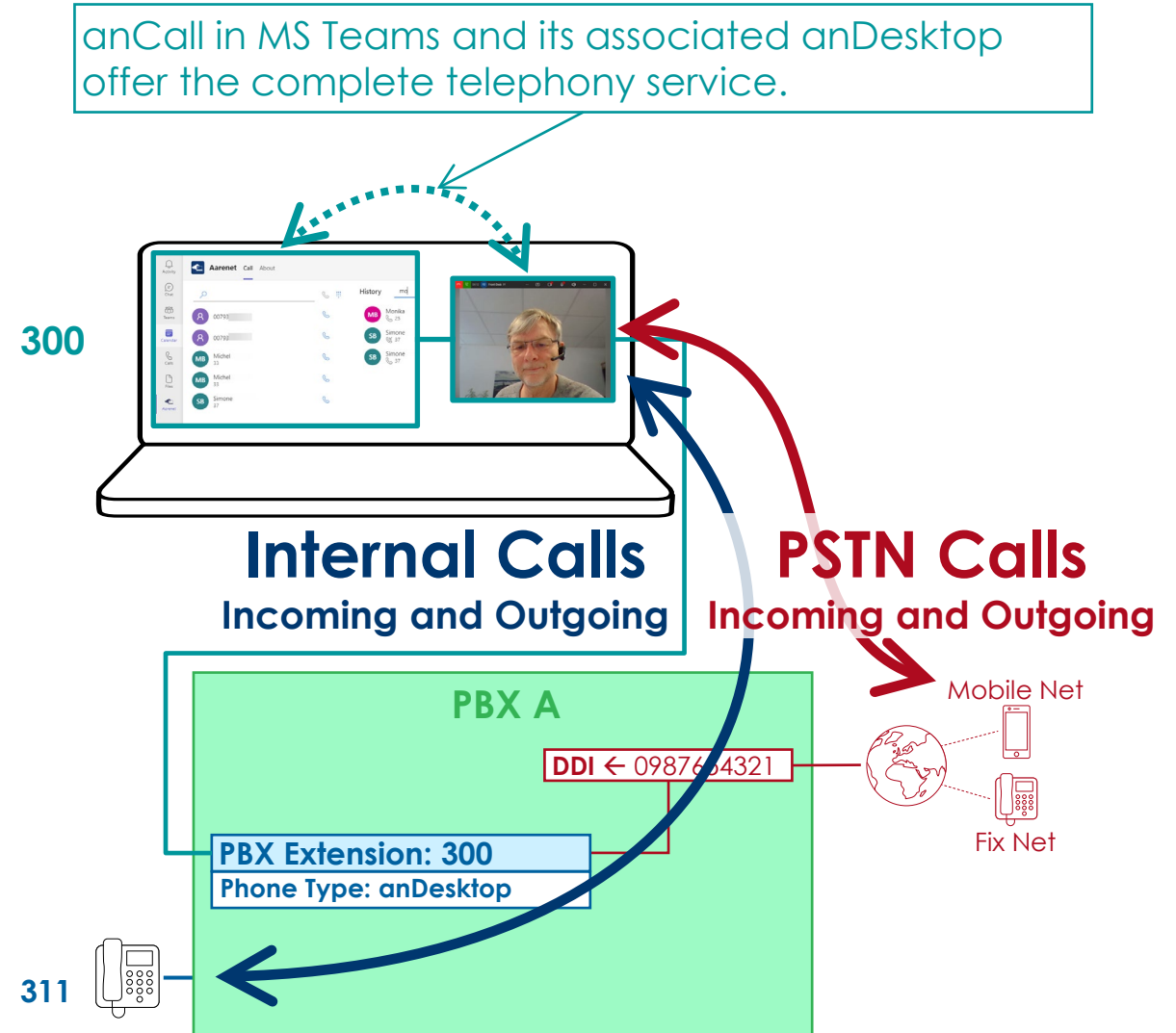
- ▶ anCall is a plugin installed in the MS Teams client.
- ▶ anCall is used as "dialer" for a phone assigned to the users PBX Extension.
 - ▶ The assigned phone is remotely controlled by anCall.
- ▶ The user starts outgoing calls via the anCall in MS Teams.
 - ▶ PBX intern and PSTN destinations
- ▶ With anCall the user has the following PBX features at hand, e.g.:
 - ▶ Access to the user's call history and directory
 - ▶ VoiceMail messages
 - ▶ Call forwarding CF, Do Not Disturb DND and call reject
- ▶ For using anCall no specific Microsoft Teams license is needed.

anCall in MS Teams acts as "dialer" for the assigned phone.



OVERVIEW OF FEATURE ANCALL FOR MS TEAMS

- ▶ By combining anCall & anDesktop, the MS Teams client becomes a fully-fledged 1st party CTI solution for the user.
 - ▶ The user starts outgoing calls via the anCall plugin in MS Teams.
 - ▶ PBX intern
 - ▶ To and from PSTN
 - ▶ The user receives incoming calls with anDesktop.
 - ▶ The user has all user and PBX features at hand which are enabled for the anDesktop of his extension.
 - ▶ Access to the user's call history and directory
 - ▶ VoiceMail messages
 - ▶ Call forwarding CF, Do Not Disturb DND and call reject
 - ▶ Can be a destination of PBX call distribution ACD, IVE, Pager/Intercom etc.

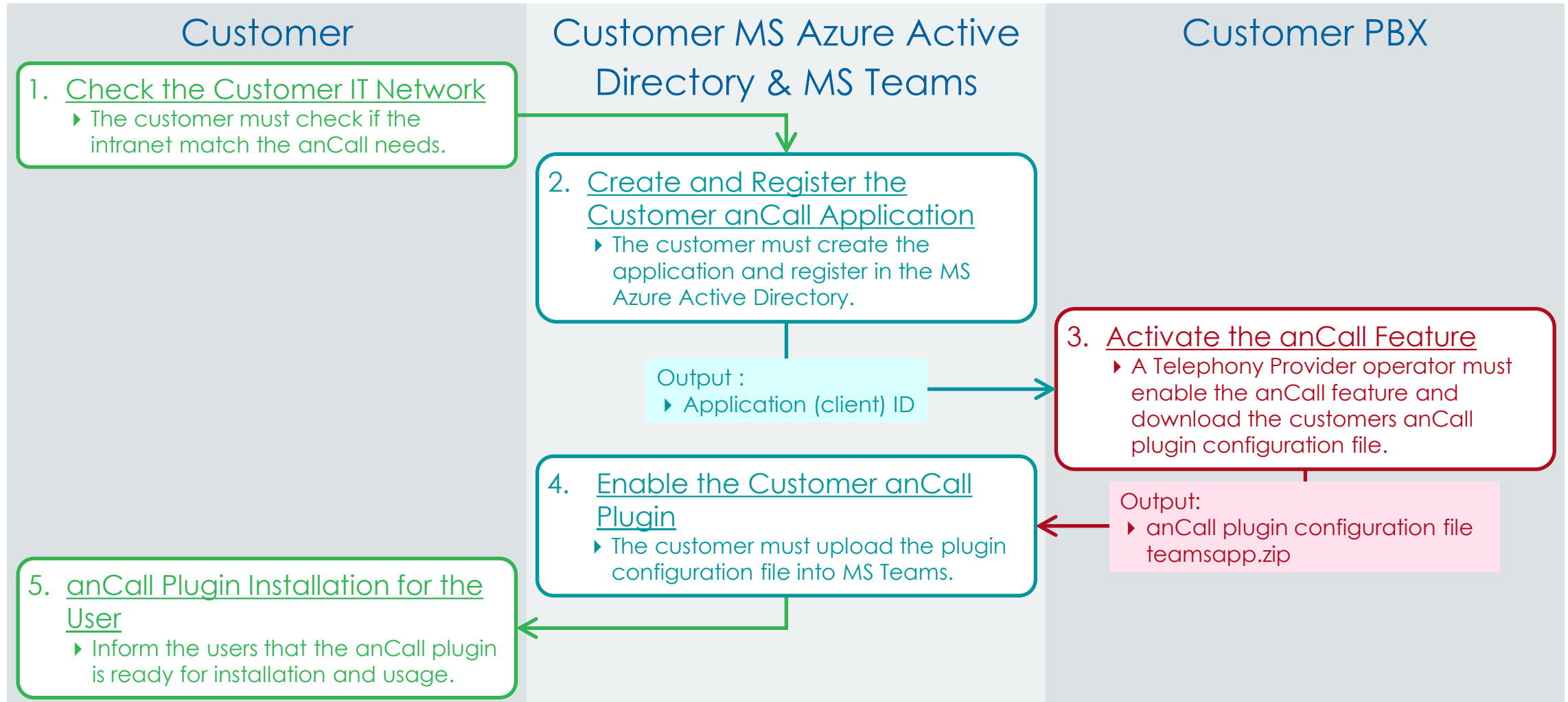


2 ANCALL PLUGIN CREATION & ACTIVATION FOR THE CUSTOMER'S PBX

OVERVIEW CUSTOMER PBX CONFIGURATIONS RESPONSIBILITIES

- ▶ The following configuration process must be performed for each customer who wants to use the anCall feature in their PBX.
- ▶ These parties are involved for activating the anCall feature:
 - ▶ Customer PBX specific configurations:
 - ▶ A Telephony Provider Operator must activate and configure the customer PBX in the Portal UI for using the anCall feature.
 - ▶ Customer specific Microsoft 365 activities:
 - ▶ MS Azure Active Directory:
 - ▶ Create and register the customer anCall application plugin
 - ▶ MS Teams :
 - ▶ Configure the customer anCall plugin for user installation

OVERVIEW PBX CUSTOMER CONFIGURATION PROCESS



Note

This process must be executed for each customer PBX only one time.

STEP 1: CHECK THE CUSTOMER IT NETWORK

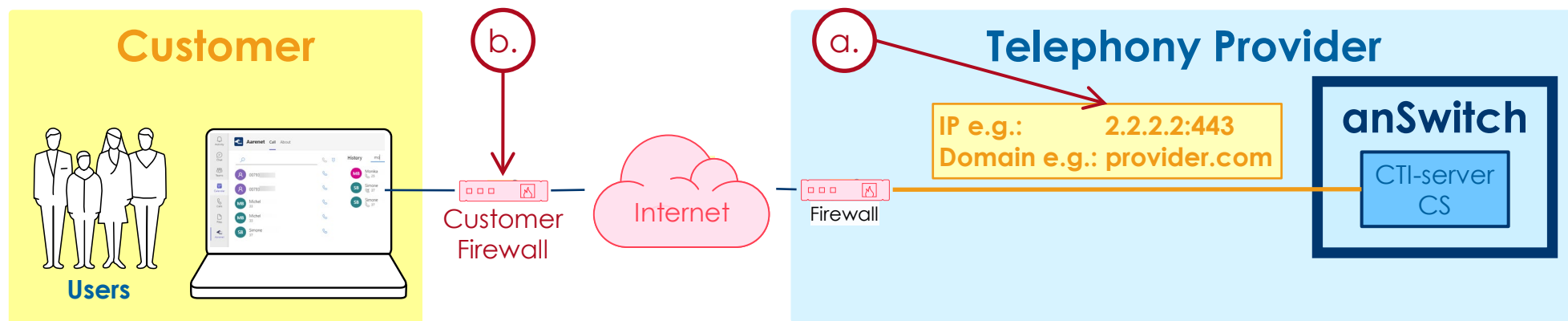
1. The customer IT responsible must:

- a. Request from the Telephony Provider the anSwitch V7 **CTI domain** name:

Name	Value	Remark / Example
anSwitch domain name for CTI access	Example: provider.com

- b. If outgoing HTTPS traffic is blocked, then configure appropriate outgoing firewall policies:

- ▶ HTTPS toward anSwitch V7:
 - ▶ Domain Name: **CTI domain** (see a.); Protocol: **HTTPS**, TCP port: **443**
- ▶ HTTPS toward Microsoft:
 - ▶ Domain Name: **sts.windows.net**; Protocol: **HTTPS**, TCP port: **443**
 - ▶ Domain Name: **login.windows.net**; Protocol: **HTTPS**, TCP port: **443**



STEP 2: PREREQUISITES FOR THE CUSTOMER ANCALL APPLICATION

- ▶ For the creation of the anCall plugin the customer (or his Microsoft partner) needs access to:
 - ▶ "Azure Active Directory admin center"
 - ▶ "Teams admin center"
 - ▶ The user acting as "MS Teams admin" needs these minimal access rights:
 - ☐ Teams Administrator
 - ☐ Application Administrator
 - ☐ Application Developer

Note

The source of following description bases on the Microsoft documentation "Single sign-on (SSO) support for tabs", Chapter "1. Create your Azure AD application":

<https://docs.microsoft.com/en-us/microsoftteams/platform/tabs/how-to/authentication/auth-aad-sso>

(The steps 13. and 14. of chapter 1. in this Microsoft document are not needed .)

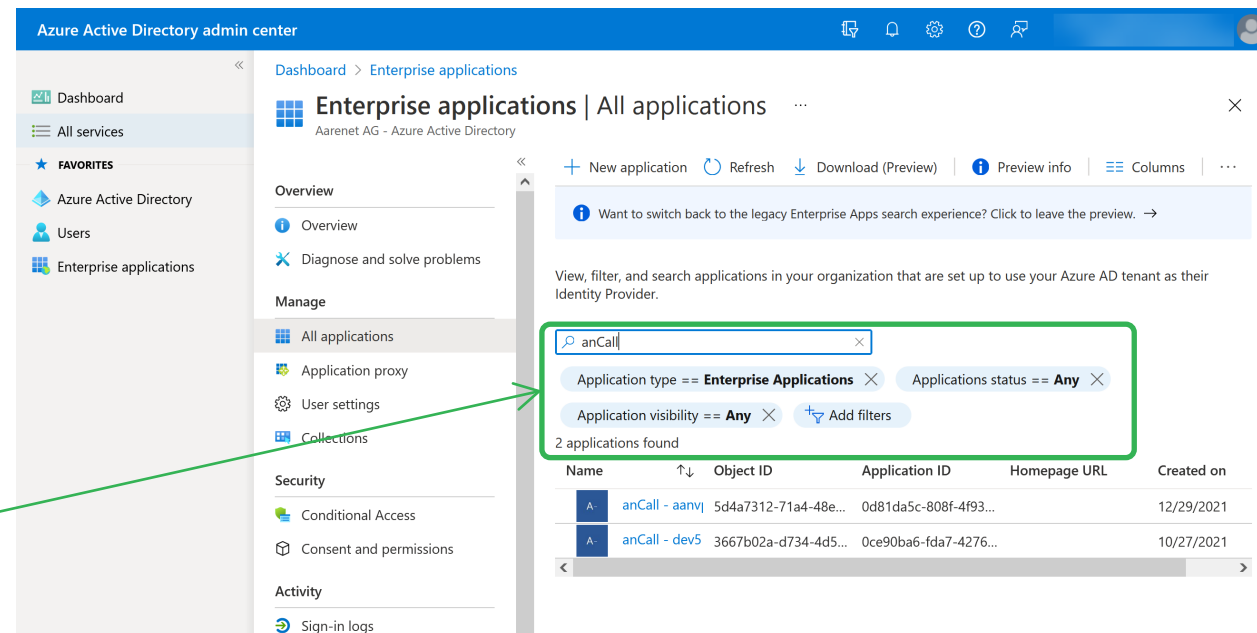
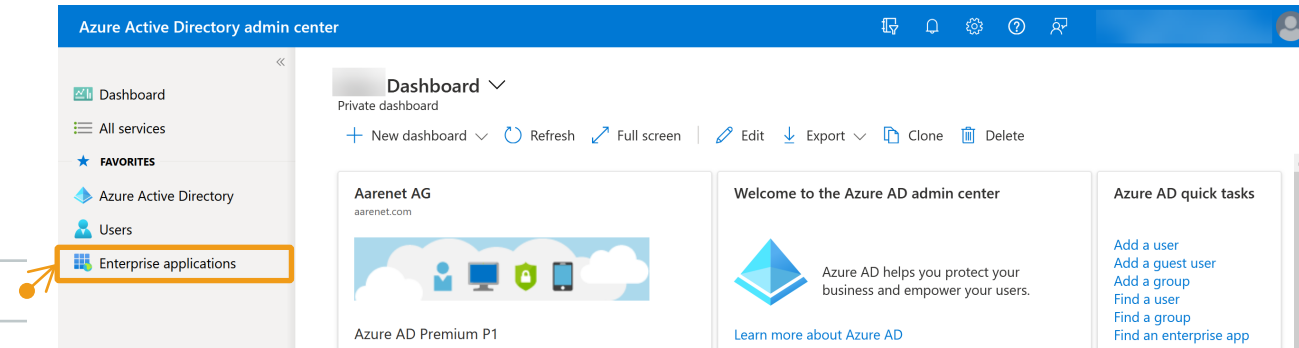
STEP 2: START CREATING THE CUSTOMER ANCALL APPLICATION

1. Login to Microsoft Azure admin center:

<https://aad.portal.azure.com/>

2. Start the creation of the customer anCall application:

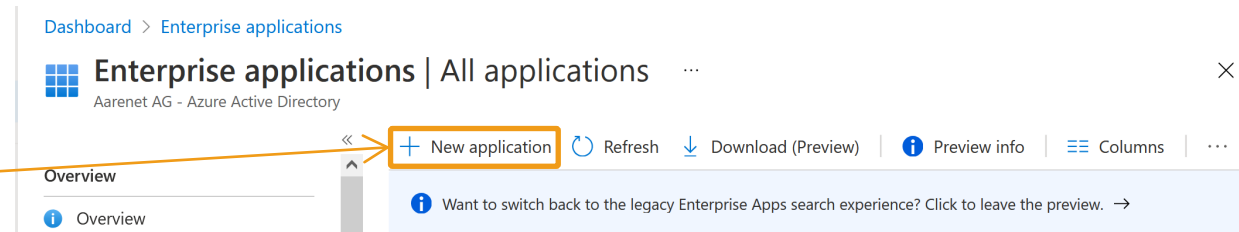
> Click menu: Enterprise applications



STEP 2: CREATE THE CUSTOMER ANCALL APPLICATION

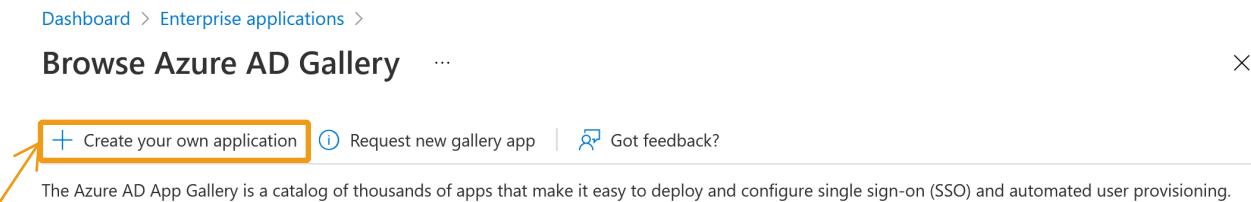
3. On page "Enterprise applications" create the new anCall application:

> Click menu: + New application



4. In frame "Browse Azure AD Gallery" start the creation of your customer application:

> Click menu: + Create your own application



5. In the dialog "Create your own application" name your application:

> Configure the plugin name, e.g.: anCall - Customer

> Select: Register an application to integrate with Azure AD
> Click button: Create

STEP 2: REGISTER THE CUSTOMER ANCALL APPLICATION

6. In frame "Register an application" register your customer application:

- > Configure the plugin name, e.g.: anCall - Customer
- > Select: Accounts in this organizational directory only ...
- > Click button: Register

Dashboard > Enterprise applications > Browse Azure AD Gallery >

Register an application ...

* Name

The user-facing display name for this application (this can be changed later).

anCall - Customer

Supported account types

Who can use this application or access this API?

☒ Accounts in this organizational directory only (Aarenet AG only - Single tenant)

☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant)

☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

☐ Personal Microsoft accounts only

[Help me choose...](#)

By proceeding, you agree to the [Microsoft Platform Policies](#)

Register

7. Check on page "Enterprise applications" if the new application e.g., "anCall – Customer" was created.

- > Search for: anCall

Use the filter options, e.g.: anCall, for reducing the huge number of displayed applications.

Manage

All applications

Application proxy

User settings

Collections

Security

Conditional Access

Consent and permissions

Activity

Identity Provider.

anCall

Application type == Enterprise Applications

Applications status == Any

Application visibility == Any

[Add filters](#)

3 applications found

	Name	Object ID	Application ID	Homepage URL	Created
	anCall - aanvpbx	5d4a7312-71a4-48e...	0d81da5c-808f-4f93...		12/29/20...
	anCall - Customer	7ecbdc70-b3ac-47d...	37729cd8-dc36-49a...		3/28/20...
	anCall - dev51	3667b02a-d734-4d5...	0ce90ba6-fda7-4276...		10/27/20...

STEP 2: GET THE CUSTOMER ANCALL APPLICATION (CLIENT) ID

8. Select the new anCall application:

- > Click menu: Azure Active Directory
- > Click sub-menu: App registrations

9. On page "App registration" open the newly registered application:

- > Double click the application row, e.g.: anCall - Customer

10. On page "anCall - Customer" get the application (client) ID

- > Copy the displayed Application (client) ID

11. Update the Operator with the Application (client) ID:

Name	Value	Remark / Example
Application (client) ID	e.g.: for anCall – Customer 37729cd8-dc36-49a2-bb3d-a43c55cbe78c

The screenshot shows the Azure Active Directory admin center interface. The left sidebar has 'App registrations' highlighted. The main area shows a list of applications under 'Aarenet AG | App registrations'. The 'anCall - Customer' application is selected, and its details are shown on the right. The 'Application (client) ID' is highlighted in an orange box, and a green box around the application row is labeled 'All registered applications of the customer are displayed.'

STEP 2: EXPOSE THE CUSTOMER ANCALL APPLICATION

12. On page "anCall - Customer" expose the new anCall application:

> Click sub-menu: Expose an API

> Click link: + Add a scope

The image displays two screenshots of the Azure portal interface, illustrating the steps to expose an API for the 'anCall - Customer' application.

Top Screenshot: The 'anCall - Customer' page is shown. The left-hand navigation pane is expanded, and the 'Expose an API' option under the 'Manage' section is highlighted with an orange box. An orange arrow points from this box to the 'Add a scope' button in the bottom screenshot.

Bottom Screenshot: The 'anCall - Customer | Expose an API' page is shown. The 'Add a scope' button is highlighted with an orange box. An orange arrow points from this box to the 'Add a scope' button in the bottom screenshot.

The 'anCall - Customer' page displays the following information:

- Display name: [anCall - Customer](#)
- Application (client) ID: 37729cd8-dc36-49a2-bb3d-a43c55cbe78c
- Object ID: 313d6d0d-bb8d-40c3-9a63-b4d8993800c7
- Directory (tenant) ID: b646e621-e6b8-4f36-8f84-15722567a2e7
- Supported account types: [My organization only](#)
- Client credentials: [Add a certificate or secret](#)
- Redirect URIs: [Add a Redirect URI](#)
- Application ID URI: [Add an Application ID URI](#)
- Managed application in local directory: [anCall - Customer](#)

The 'Scopes defined by this API' section shows the following information:

- Application ID URI: [Set](#)
- Scopes defined by this API: Define custom scopes to restrict access to data and functionality protected by the API. An application that requires access to parts of this API can request that a user or admin consent to one or more of these.
- Adding a scope here creates only delegated permissions. If you are looking to create application-only scopes, use 'App roles' and define app roles assignable to application type. [Go to App roles](#).
- [+ Add a scope](#)

Scopes	Who can consent	Admin consent disp...	User cons
No scopes have been defined			

STEP 2: CONFIGURE THE CUSTOMER ANCALL APPLICATION SCOPE

13. On page "anCall - Customer" create the application ID URI.

- a. Extend the generated Application ID URI with the customer domain name

Name	Value	Remark / Example
anSwitch domain name for CTI access	Example: provider.com

- > Modify the initial Application ID URI with the anSwitch CTI domain name. Example:
Displayed value: `api://37729cd8-...`
→ Modified to value: `api://provider.com/37729...`
- > Click button: Save and continue

- b. Configure the scope with the parameter values

Name	Value
Scope name	access_as_user
Who can consent?	Select: Admin and user
Admin consent display name	Teams can access the user's profile.
Admin consent description	Teams can call the app's web APIs as the current user.
User consent display name	Teams can access your profile and make requests on your behalf.
User consent description	Teams can call this app's APIs with the same rights as you have.
State?	Select: Enabled

- c. Add the scope:

- > Click button: Add scope

Top Screenshot: Application ID URI

Application ID URI *

Scopes defined: Define custom scopes that require access to parts of the application. Adding a scope requires access to the application's 'App roles' and 'App roles'.

Bottom Screenshot: Add a scope

Scope name *

Application ID URI

Who can consent? ☒ Admins and users ☐ Admins only

Admin consent display name *

Admin consent description *

User consent display name

User consent description

State ☒ Enabled ☐ Disabled

Buttons: Save and continue, Add scope, Cancel

STEP 2: ADD CLIENT APPLICATION ID TO THE SCOPE

14. On page "anCall - Customer" add all Microsoft application IDs to the scope:

Client ID Name	Value
Teams web application	5e3ce6c0-2b1f-4285-8d4b-75ee78787346
Teams mobile or desktop application	1fec8e78-bce4-4aaf-ab1b-5451cc387264
Office on the web	93d53678-613d-4013-afc1-62e9e444a0a5
Microsoft 365 web application	0ec893e0-5785-4de6-99da-4ed124e5296c
Microsoft 365 mobile application	d3590ed6-52b3-4102-aeff-aad2292ab01c
Outlook web application	bc59ab01-8403-45c6-8796-ac3ef710b3e3
Outlook mobile application	27922004-5251-4030-b22d-91ecd9a37ea4

Note

The configuration of these Microsoft application IDs is mandatory!
The values must not be changed!

► Add a Microsoft application ID:

> Click link: + Add a client application

► Configure the Microsoft application ID:

> Copy and configure the Client ID

> Select: Authorized scope

> Click button: Add application

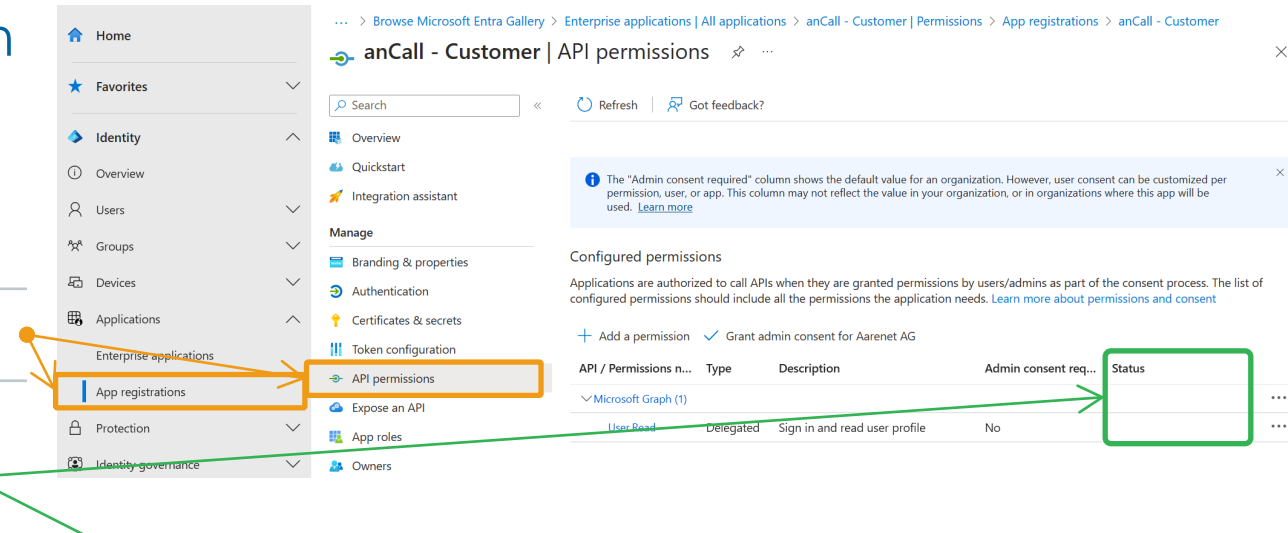
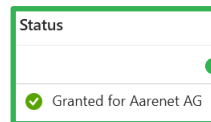
STEP 2: GRANT ADMIN CONSENT

15. Check and grant if needed the "admin consent".

a. Check if the customer admin consent is granted

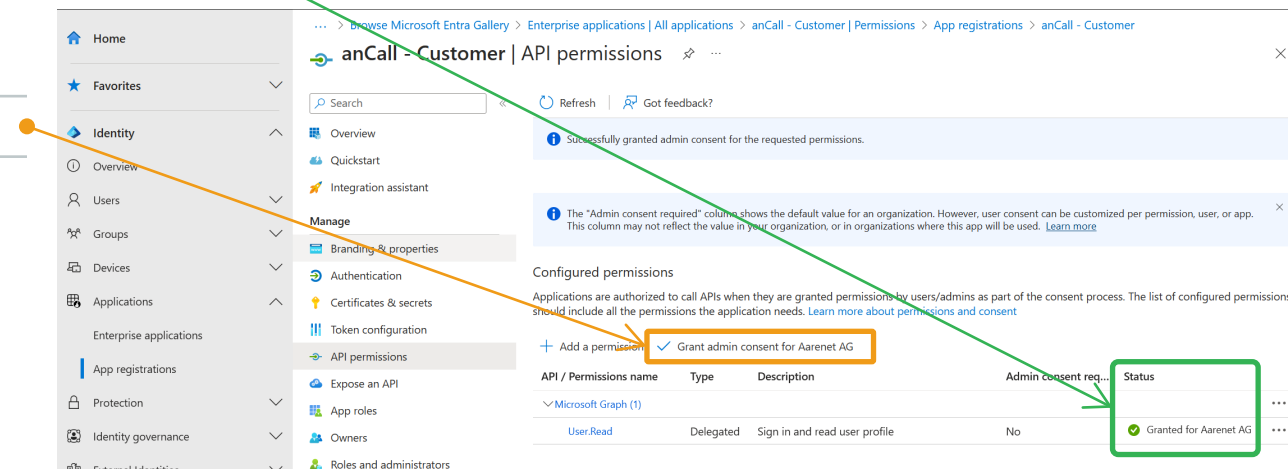
- > Click sub-menu: App registrations
- > Click sub-menu: API permissions

► Expected is at "Status":



b. If no "admin consent" is assigned, then grant it:

- > Click button: Grant admin consent for ...



STEP 3: ACTIVATE THE ANCALL FEATURE FOR THE PBX

1. Login to the Portal UI as **Operator**.

2. Navigate to the customer PBX OrgUnit:

- > Click menu: Operations
 - > Click sub-menu: Organization Units
 - > Select the OrgUnit of the customer PBX
- > Add and configure new attribute: ctiUrl

Name	Value	Remark / Example
Attribute: ctiUrl	https://...../cti	Example URL: https://provider.com/cti

Note The attribute ctiUrl may also be defined in a parent OrgUnit of the customer PBX.

3. Configure the Application (client) ID in the customer PBX:

- > Click menu: PBX
 - > Click sub-menu: PBX Settings
- > Configure the Application (client) ID
- > Click button: Save

Name	Value	Remark / Example
Application (client) ID	Example for anCall – Customer: 37729cd8-dc36-49a2-bb3d-a43c55cbe78c

Attribute ×

Save

Name
ctiUrl

Value
https://provider.com/cti

PBX Settings PA-PBX-0AX89001

PBX Dashboard PBX List

Save

PBX	Public numbers	Properties
Name PA-PBX-0AX89001 Description Yupi Inc., Honolulu, 0987654300 – 49, 0800654310 080065 Member of Provider A Teams Domain	Number range 0449980105,0550-9,0650-9,0800654310,0800654340,098 Valid from 20.04.2021 06:00 Valid until	Extensions 10 Service Extensions 10 External channels 20 Public Prefix Time Zone Europe/Zurich Date Format dd.MM.yyyy Time Format 24 Hours Time mode Timetable

On Hold Music
 Upload
 0:00

anCall
 Application ID
 37729cd8-dc36-49a2-bb3d-a43c55cbe78c
 anCall has no application ID configured

STEP 3: DOWNLOAD THE ANCALL PLUGIN CONFIGURATION

4. Download the customer anCall plugin configuration file:

> Click link: Click here

5. Send the customer MS Teams admin the anCall plugin configuration file:

Name	Value	Remark / Example
Customer anCall plugin configuration file.	teamsapp.zip	

PBX Settings PA-PBX-0AX89001

[PBX Dashboard](#) [PBX List](#)

[Save](#)

PBX	Public numbers	Properties
Name PA-PBX-0AX89001	Number range 0449980105,0550-9,0650-9,0800654310,0800654340,098	Extensions 10
Description Yupi Inc., Honolulu, 0987654300 – 49, 0800654310 080065	Valid from 20.04.2021 06:00	Service Extensions 10
Member of Provider A	Valid until	External channels 20
Teams Domain		Public Prefix
		Time Zone Europe/Zurich
		Date Format dd.MM.yyyy
		Time Format 24 Hours
		Time mode Timetable

On Hold Music

[Upload](#) ▶ 0:00 – 🔊

anCall

Application ID
37729cd8-dc36-49a2-bb3d-a43c55cbe78c

[Click Here](#) to download the settings for the anCall App

STEP 4: ENABLE THE CUSTOMER ANCALL PLUGIN

- ▶ For enabling the anCall plugin in the Teams org app repository the customer's MS Teams admin must upload the in step 3. generated file `teamsapp.zip`.

Note

Per Teams org app repository only 1 version of an anCall plugin can be uploaded!

- ▶ After the enabling of the anCall plugin the users can install the plugin in their MS Teams client.
- ▶ The uploading of the customer anCall configuration must be done in the Microsoft "Teams admin center".
 - ▶ The user acting as "MS Teams admin" needs these minimal access rights:
 - ☐ Teams Administrator
 - ☐ Application Administrator
 - ☐ Application Developer

STEP 4: UPLOAD THE ANCALL CUSTOMER CONFIGURATION

1. Login to the Microsoft Teams admin center:

<https://admin.teams.microsoft.com/>

2. Navigate to the application management page:

> Click menu: Teams apps

> Click sub-menu: Manage apps

3. Upload the custom app anCall:

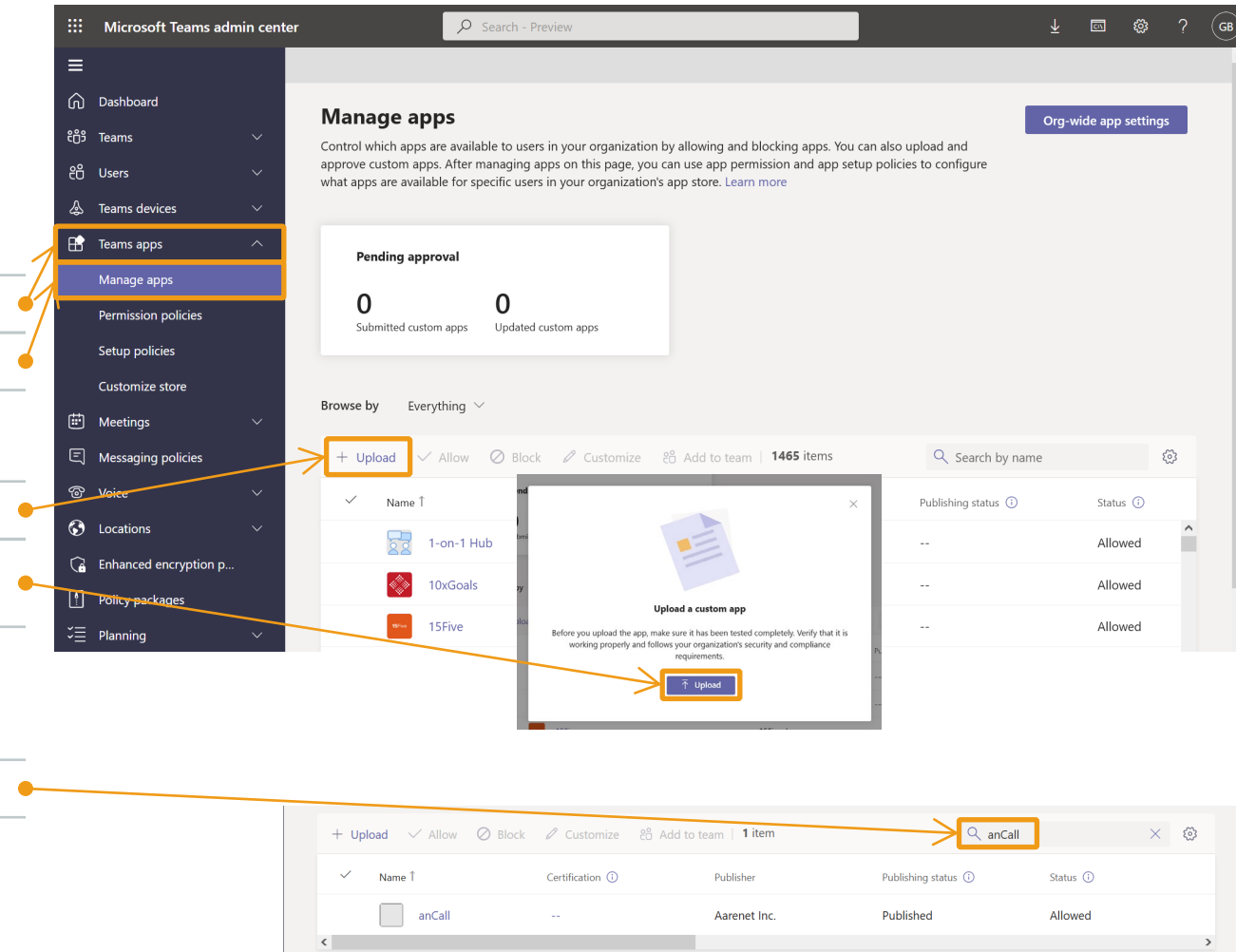
> Click link: + Upload

> Click button: Upload

> Find and upload the file: teamsapp.zip

4. Check the upload:

> Search for: anCall



3 ANCALL PLUGIN INSTALLATION FOR THE USER

INSTALLATION OF THE ANCALL PLUGIN IN THE MS TEAMS CLIENT

- ▶ In the MS Teams client, the user must install the anCall plugin and assign the desired phone of the own PBX extension.

1. Install the "anCall plugin":

- > Start the MS Teams Client

Note

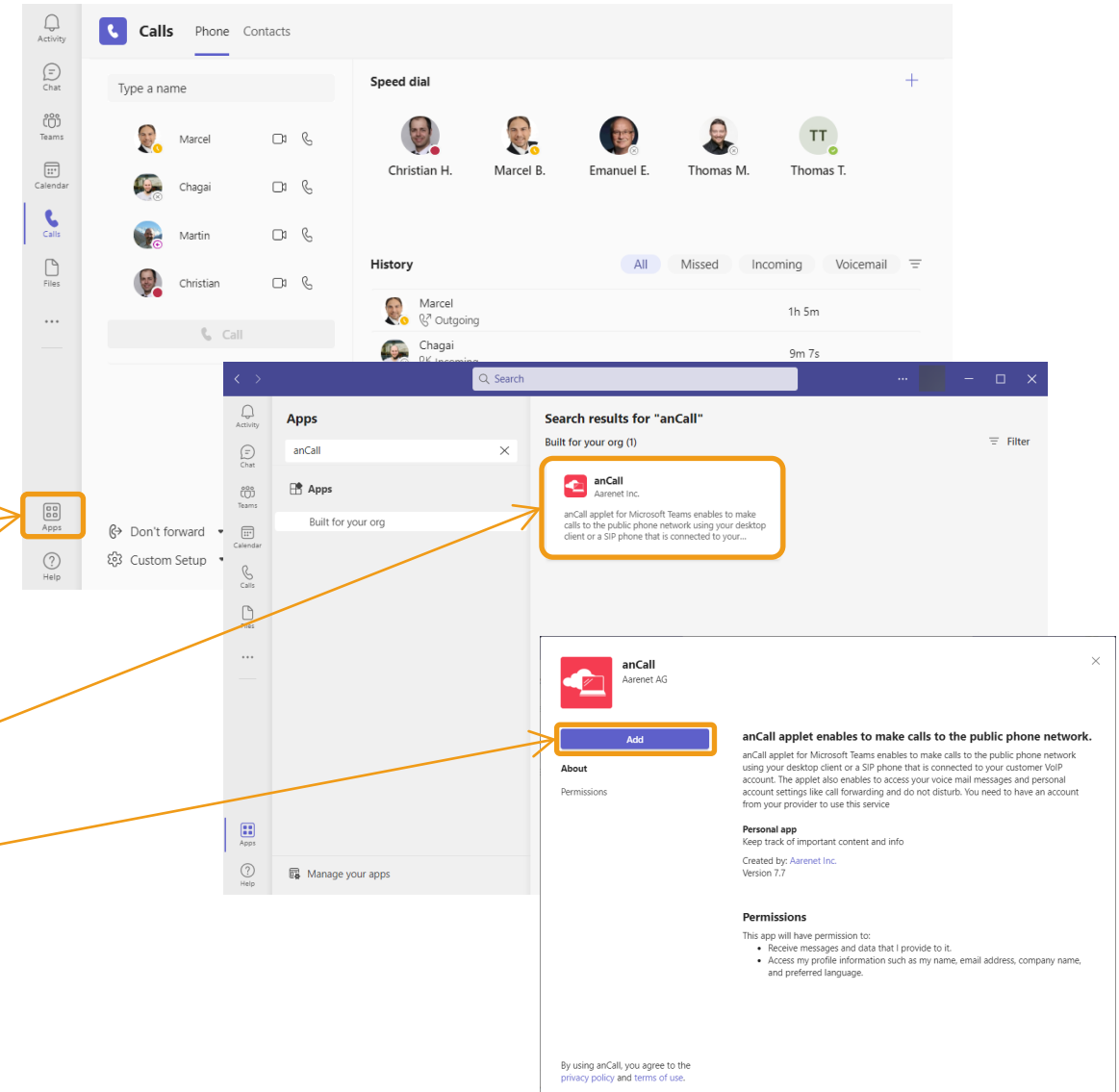
Make sure you start the MS Teams client with the same user email address that you use to log in to the Portal UI as PBX Member.

- > Click on menu: Apps

- > Select the anCall Plugin in the section "Built for your org".
Note: The name of the plugin may be different in your PBX.

- > Click button: Add

- ▶ The anCall plugin is installed and becomes visible in the left menu strip.



CONFIGURATION OF ANCALL FOR INTERWORKING WITH ANDESKTOP

2. Configure anCall for interworking with anDesktop.

- Make sure that anDesktop is installed
For details see the document:
"anCall for MS Teams Client"
(Doc-ID: training_as7_803_ancall_e)

> Start the anCall plugin

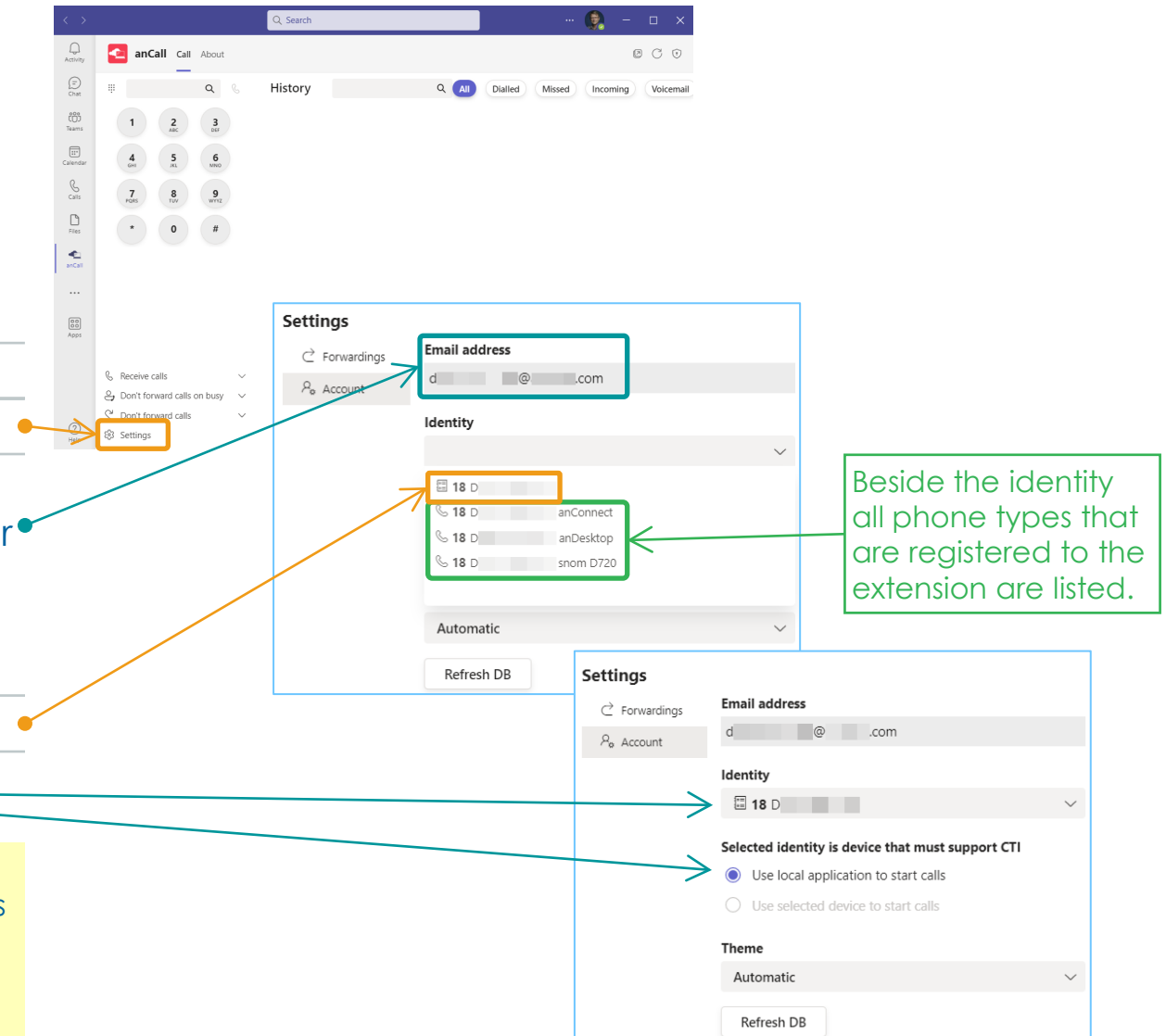
> Click: Settings.

- Check if the email address (reference to your user account of your extension) is correct.

- Select your identity (not a phone).

> Select your identity

- Check the configuration.



Note

If you have several soft phone applications installed on your PC, make sure that anDesktop is assigned as your default phone application. If this is not desired or possible, then configure the interworking as described on page "Configuration of anCall as Dialer".

CONFIGURATION OF ANCALL AS DIALER

2. Configure anCall as "dialer".

> Start the anCall plugin

> Click: Settings.

a. Check if the email address (reference to your user account of your extension) is correct.

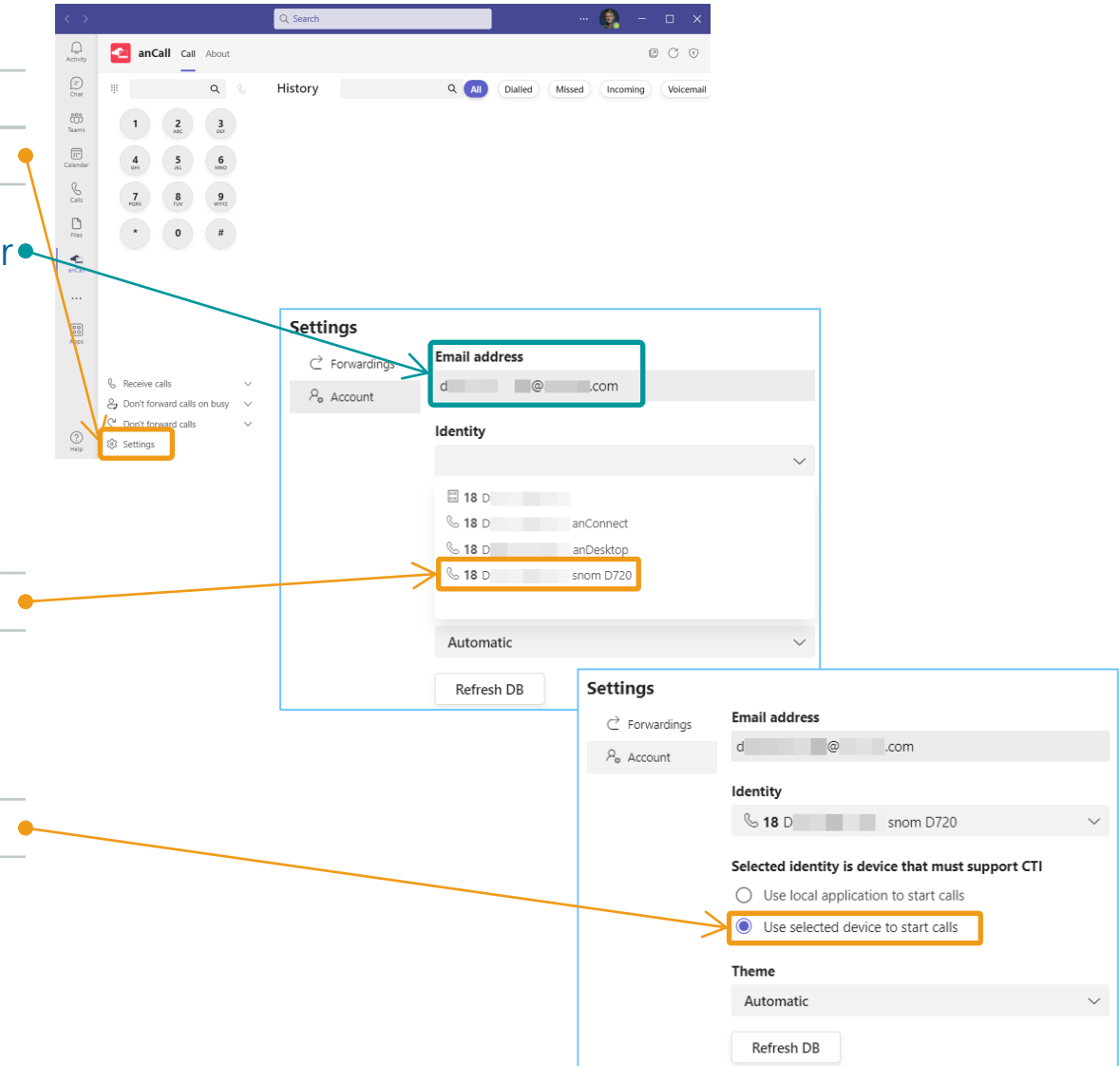
b. Select the phone of your extension.

▶ You can select any phone type physical or soft phone.

> Select the desired phone

c. Select the type of dialer

> Select: "Use selected device to start calls"



USER OPTIONAL CONFIGURATIONS OF THE ANCALL PLUGIN

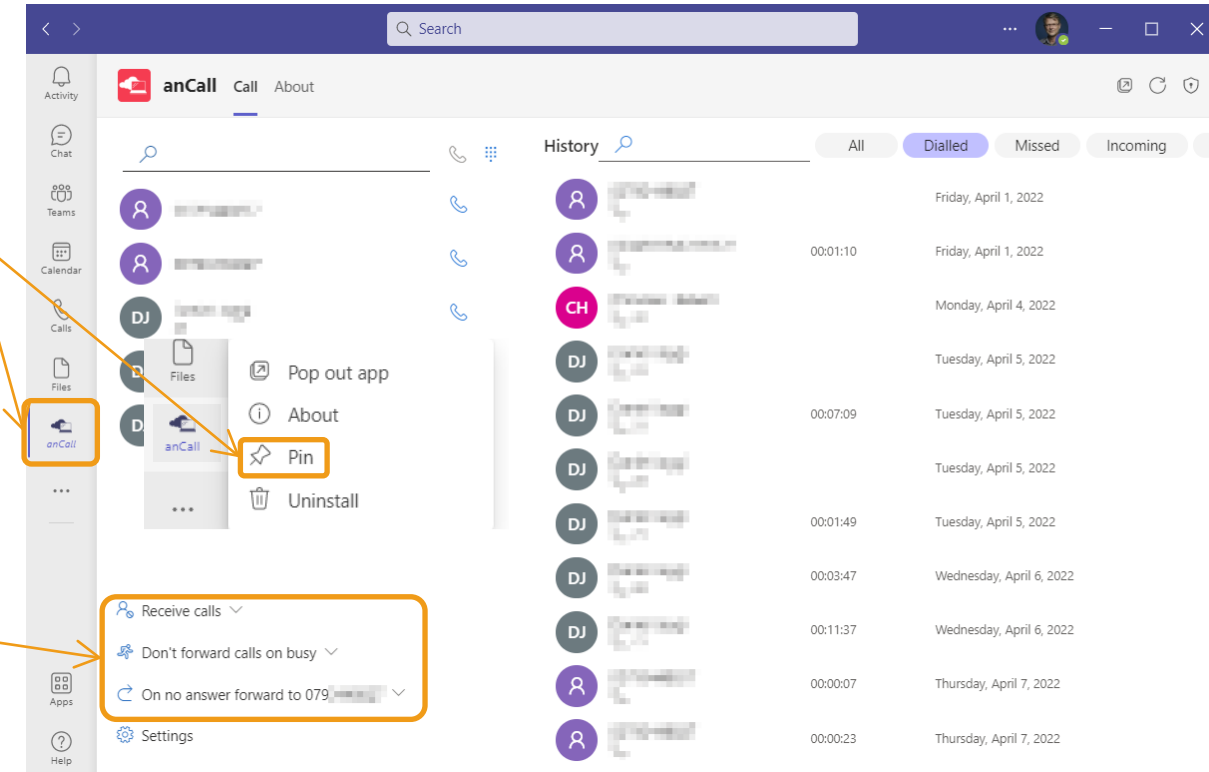
4. Configure easy anCall access:

> Start the anCall plugin

> Optional:

Pin the app permanently to the left menu strip:
> Right click the icon and select: Pin

5. Configure optional Call forwarding CF, Do Not Disturb DND and call reject.



4 ANCALL PLUGIN UPDATING, CUSTOMIZING, MANAGING

UPDATE OR ACTIVATE A CUSTOMIZED ANCALL PLUGIN

- ▶ If the customer has not yet an anCall plugin activated, then install the delivered teamsapp.zip as described in:

- ▶ [Step 4: Enable the Customer anCall Plugin](#)

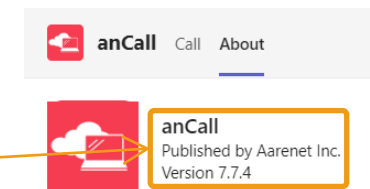
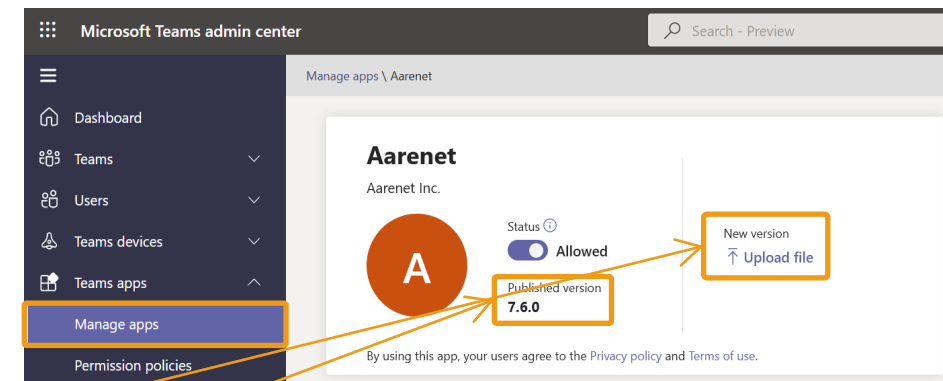
- ▶ If the customer has already installed an anCall plugin version, then:

1. Load the update or customization Zip file as new version:

- > Click button:  Upload file
- > Find and upload the update or customized Zip file
- > Check the new version in the MS Teams admin center

2. Check the new version in the user MS Teams client

- > Click tab: About



Note

If the user's anCall plugin is not updating automatically after some hours, then the user can do the following:

- ▶ Quit the MS Teams client and restart it.
- ▶ Restart the PC

DELETE THE ANCALL CUSTOMER APPLICATION

1. Login to the Microsoft Teams admin center:

<https://admin.teams.microsoft.com/>

2. Navigate to the application management:

> Click menu: Teams apps

> Click sub-menu: Manage apps

3. Select on page "Manage apps" the application to delete:

> Search for the app

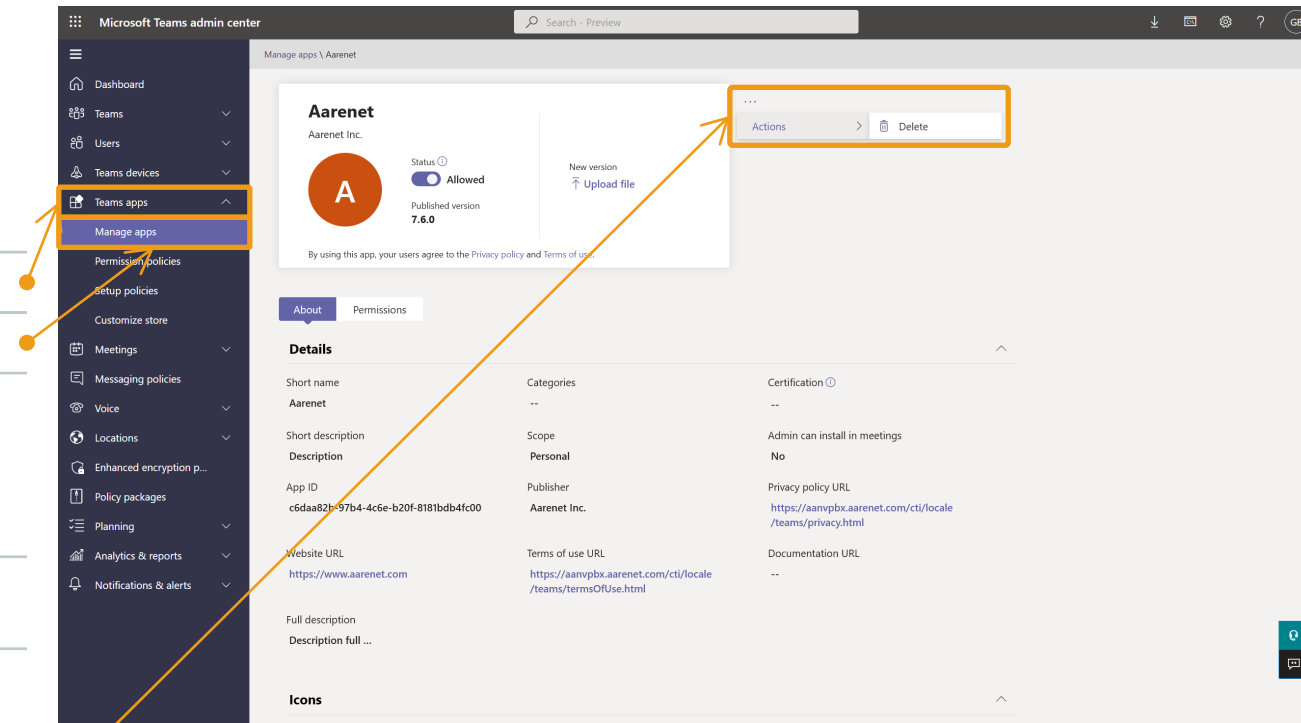
> Click the name of the app

4. Delete the application:

> Click the eclipse: ...

> Click button: Action

> Click button: Delete



Note

- ▶ Teams needs some time until the application is deleted and no more visible in the Teams client as installable application.
- ▶ The application is automatically uninstalled in all Team clients of the users.

5 ANCALL ANSWITCH V7 SYSTEM CONFIGURATION

OVERVIEW OF THE ANSWITCH SYSTEM LEVEL CONFIGURATIONS

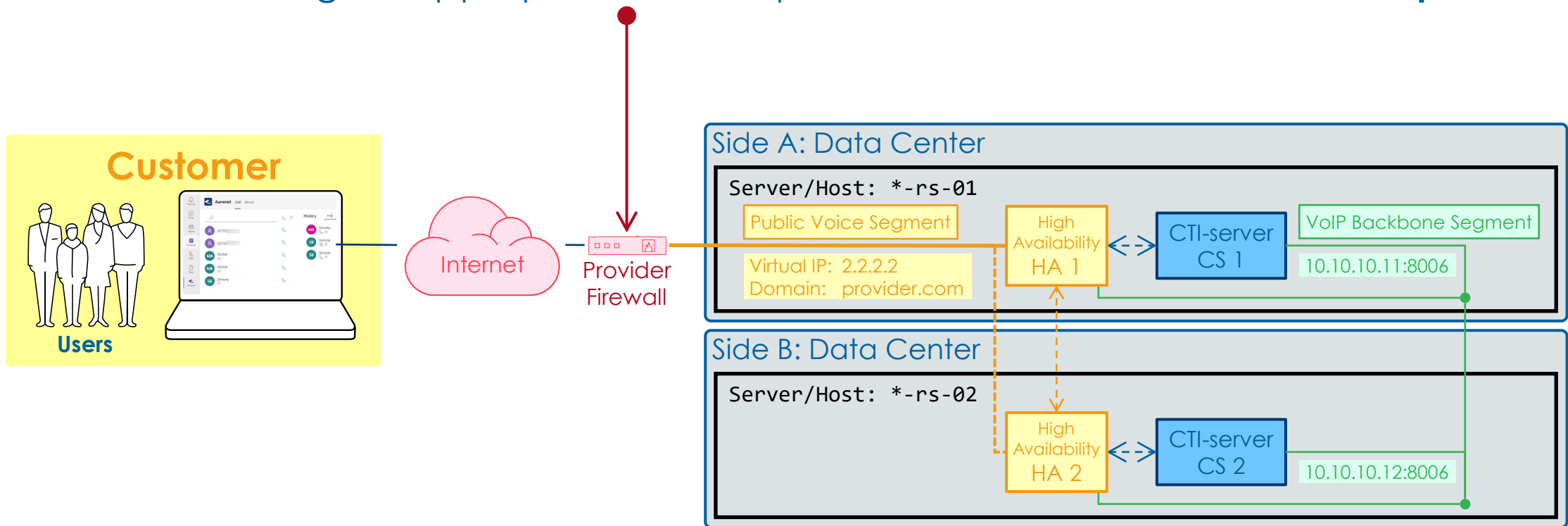
- ▶ Overview of the anSwitch System Level Configurations:
 1. Make sure the IP routing toward the anSwitch CTI-Server.
 2. Configure the high availability HA on component level.
 3. Configure the CTI-Server on component level.

Note

This anSwitch system wide configuration must be done only one time per anSwitch V7.

MAKE SURE THE IP ROUTING TOWARD THE ANSWITCH CTI-SERVER

1. Make sure that the IP routing between the customer's anCall users and the Public VoIP segment of the anSwitch is end-to-end:
 - Configure appropriate firewall policies: anSwitch CTI → **HTTPS, TCP port: 443**



Note

The IP addresses and domain names are example values.

CONFIGURE THE HIGH AVAILABILITY HA ON COMPONENT LEVEL

2. Configure the HA Proxy on component level:

- ▶ For using the anCTI Library of the CTI API, it needs the HA service of the anSwitch V7.
- ▶ The HA service provides the needed certificate for HTTPS for the CTI-clients using the anCTI library.
- ▶ For setting up the HA service Aarenet system engineers are required.

CONFIGURE THE CTI-SERVER ON COMPONENT LEVEL

3. To trust the Microsoft token ALL anSwitch CTI-Server components needs the following configuration:

- ▶ For setting up the HA service Aarenet system engineers are required.

a) Create the CTI configuration file:

```
[root@]# vi /etc/aareswitch/ctiserver/config.js
```

b) Insert in the new file the following contents:

```
1 singleton("com.aarenet.phoenix.data.jwt.JwtProvider");
2 var issuerWindows = mbean("Jwt:type=Issuer,name=windows");
3 issuerWindows.UrlPattern = "https://sts\.windows\.net/.....-.....-.....-.....-.....";
4 issuerWindows.EmailProperty = "unique_name";
```

c) Restart the CTI-Server component

6 TROUBLE SHOOTING

ACCESSING LOG INFORMATION

- ▶ anCall is handled via the CTI-Server. So, all log information are logged in the CTI-Server log.
- ▶ Access the CTI-Server log via SSH account of the server/host:
 - ▶ Login as user root or change to sudo

- ▶ Example: Search all log files and filter for a certain string.
Check the login of anCall user John Deer → use the email address

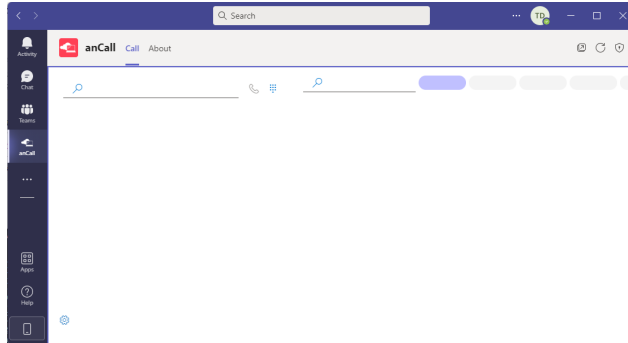
```
[root@]# cd /var/log/ctiserver  
[root@]# grep john.deer@ ctiserver*.log
```

- ▶ Example: With doobby follow the actual log entries and filter for a certain string.
Check the login of anCall user John Deer → use the email address:

```
[root@]# doobby tail ctiserver | grep john.deer@
```

PROBLEM: EMPTY ANCALL FRAME IN MS TEAMS CLIENT

► Problem: Empty anCall Frame in MS Teams Client



► Checks:

1. Check if the MS Teams user email address is also used in a PBX user account.
2. Check if the PBX user account has assigned an PBX extension and the PBX extension has assigned phones.

PROBLEM: EMPTY ANCALL FRAME IN MS TEAMS CLIENT

- ▶ Checks:
 - ▶ Check if the CTI-Server authenticate the anCall login and provides extension phone information
 - ▶ Login as root on the server/host
 - ▶ Close the MS Teams client
 - ▶ Start the log filter, e.g. for john.deer@customer.com
- ```
[root@]# doobby tail ctiserver | grep john.deer@
```
- ▶ Start the MS Teams client of user John Deer
  - ▶ Expect the following information:

The user is successful authenticated.

The user basic info and the list of assigned phones to the extension is provided.

```
2022-05-11-14:13:44.881 [DEBUG] JwT (cs1/CSTA01) authenticated user by email john.deer@customer.com
2022-05-11-14:13:44.881 [DEBUG] CtiClient (cs1/CSTA01) authenticated by token: john.deer@customer.com
2022-05-11-14:13:44.898 [DEBUG] CtiLinkWs (cs1/CSTA01) send:
{"StartApplicationSessionPosResponse":{"config":{"language":"en","firstName":"John","lastName":"Deer","email":"john.deer@customer.com","deviceList":[{"deviceID":"sip:18@term.1612","number":"18","name":"John Deer","type":"anConnect","terminal":"John Deer's anConnect"}, {"deviceID":"sip:2288@ou.816","number":"2288","name":"Dani Doc Cabinet"}, {"deviceID":"sip:18@term.77","number":"18","name":"John Deer","type":"snomD735","terminal":"John Deer's snom D720"}, {"deviceID":"sip:18@ou.4","number":"18","name":"John Deer"}]}, "token":"eyJ0eXAiOiJqd3QiLCJhbGciOiJIUzI1NiJ9.eyJ1aWQiOiJpI2LCJleHAiOiJlE2NTI4NzYwMjQsImVtYWlsIjoizGFuaWVsLmJvY2hzbGVyQGFhcmVuZXQuY29tIn0.2D5xFSnb1d0w6-4i8ThLzCXpGW1JXoege6oN-tStWvU;max-age=604800"},"sessionID":"134","actualProtocolVersion":"http://www.ecma-international.org/standards/ecma-323/csta/ed6","actualSessionDuration":315360000,"invokeID":"1"}}
```

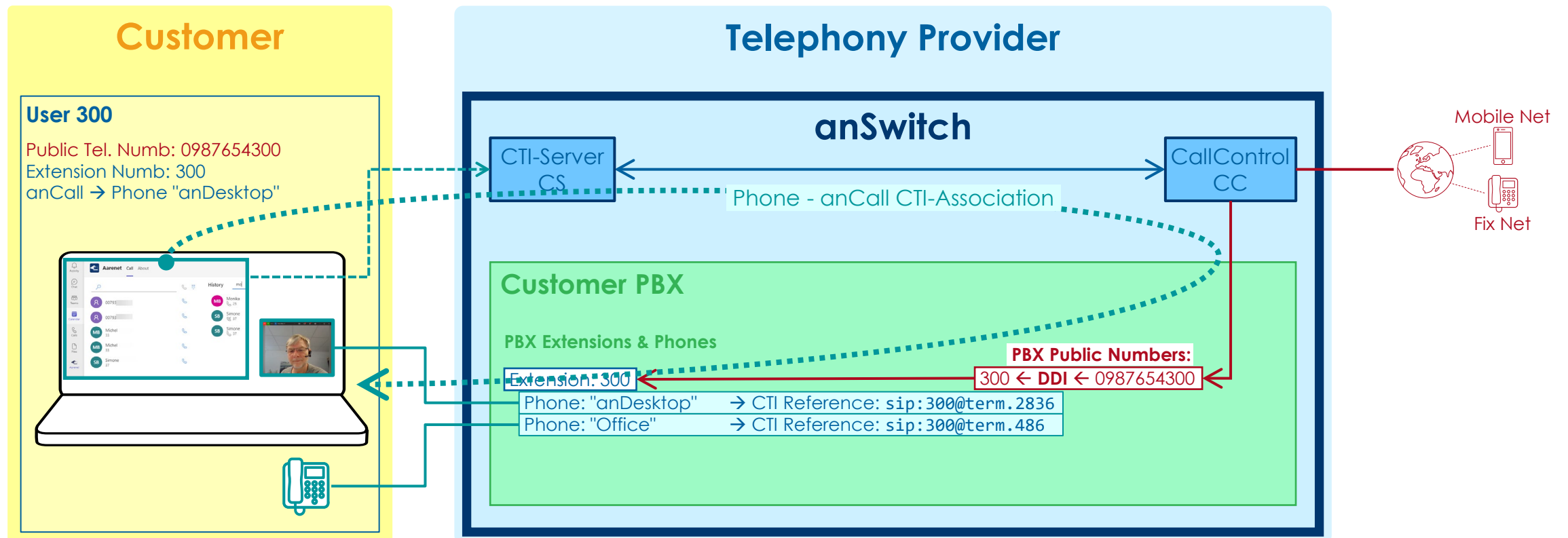


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# 7 BEHIND THE SCENES

# OVERVIEW ANCALL INTEGRATION

- ▶ The anCall plugin remote controls the associated phone via the CallControl API:
  - ▶ Incoming Call:
    - ▶ The CallControl signals an incoming call to the associated phone.
    - ▶ Incoming calls are not signaled to the anCall plugin.
  - ▶ Outgoing Call:
    - ▶ The anCall plugin requests the CTI-Server to initiate an outgoing call on behalf of the associated phone.
    - ▶ The CallControl signals an outgoing call to the associated phone.



# LAST PAGE

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| Date       | Doc-ID                      | Description                                         | Changes               |
|------------|-----------------------------|-----------------------------------------------------|-----------------------|
| 5.6.2023   | training_as7_803_ancall_e14 | Minor updates for better usage                      | Pages 17. 32, 33, 39  |
| 28.6.2023  | training_as7_803_ancall_e15 | Enhancement with anSwitch V7.12, anDesktop interop. | Overdone chapter 1, 3 |
| 16.10.2023 | training_as7_803_ancall_e16 | Clarify the role of MS Teams                        | Pages 6, 7            |
| 9.2.2024   | training_as7_803_ancall_e17 | Microsoft modified the process: Grant admin consent | Page 20               |