

Telehealth with Microsoft Teams

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System Administration

Microsoft Entra Setup

In order to use the Microsoft Teams API, you must set up API keys in your account. Read how via [Microsoft Entra - Register Application](#).

Deployment models

The teams deployment can be configured in two ways.

- **Recommended:** Adding specific users into a group and maintaining the access to teams via Powershell.
- Alternatively, setting up a single user who is the *facilitator* of all of the meetings. IE: [no-reply@your-organisation](#). This requires less maintenance, but provides significant disadvantages.

Required permissions

The minimum permissions required are

- OnlineMeetings.ReadWrite.All
- VirtualAppointment.ReadWrite.All
- User.Read.All

The screenshot displays the Microsoft Azure portal interface for managing API permissions. On the left, the 'API permissions' tab is selected in the left-hand navigation pane. The main content area shows the 'Configured permissions' section, where a table lists the permissions granted to the application. The table has columns for 'API / Permissions name', 'Type', 'Description', and 'Admin consent required'. A single permission is listed: 'OnlineMeetings.ReadWrite.All' of type 'Application', with a description 'Read and create online meetings' and 'Admin consent required' set to 'Yes'. Above the table, there is a '+ Add a permission' button, which is highlighted with a red box. To the right, a 'Request API permissions' pane is open, showing a list of 'Commonly used Microsoft APIs'. The 'Microsoft Graph' API is selected and highlighted with a red box. Below it, other APIs like 'Azure Communication Services', 'Azure DevOps', 'Azure Rights Management Services', 'Azure Service Management', 'Data Export Service for Microsoft Dynamics 365', 'Dynamics 365 Business Central', 'Dynamics CRM', 'Intune', and 'Office 365 Management APIs' are listed.

API / Permissions name	Type	Description	Admin consent required
OnlineMeetings.ReadWrite.All	Application	Read and create online meetings	Yes

After adding these, you will need *Grant admin consent*.

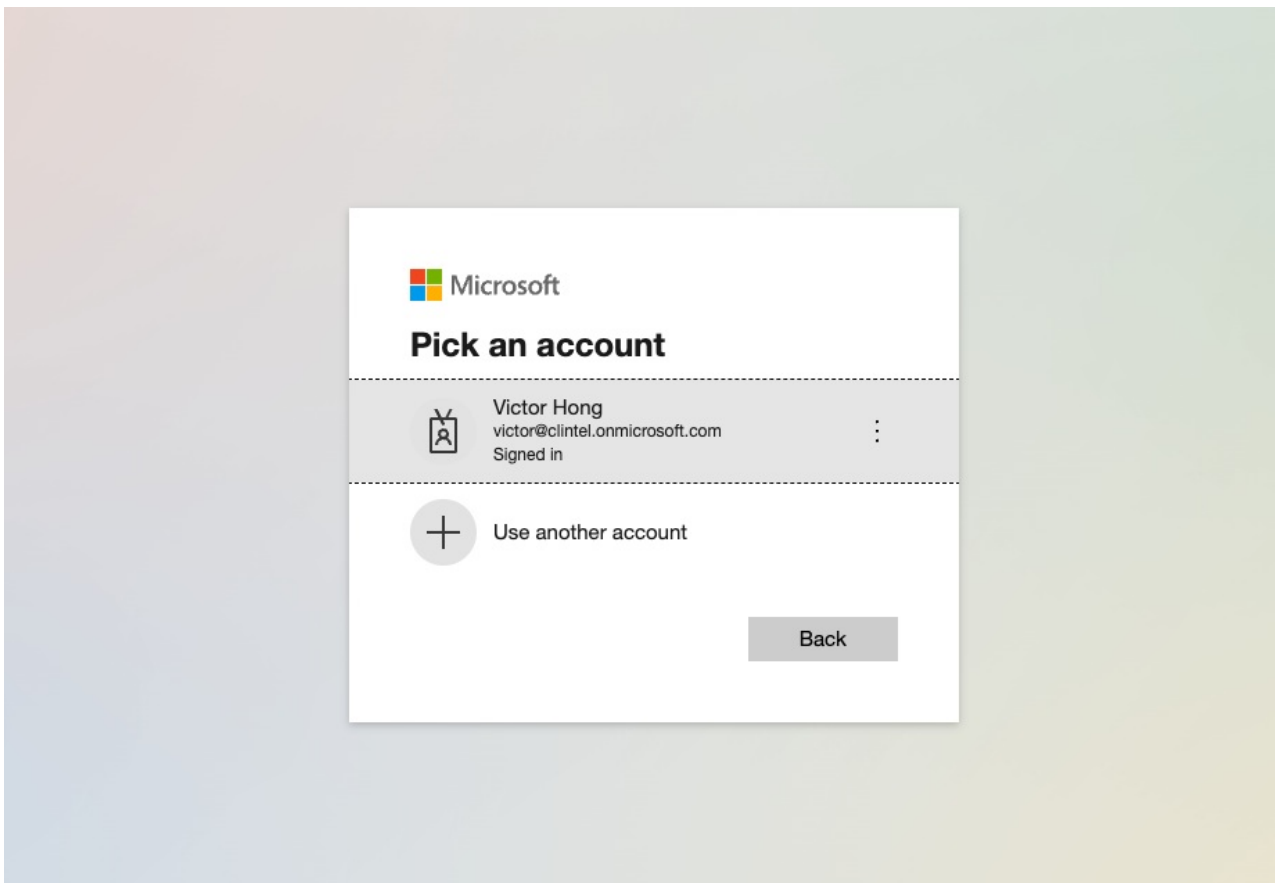
+ Add a permission		✓ Grant admin consent for Clintel Systems		
API / Permissions name	Type	Description	Admin consent requ...	Status
Microsoft Graph (3)				
OnlineMeetings.ReadWrite.All	Application	Read and create online meetings	Yes	✓ Granted for Clintel Syste... ***
User.Read.All	Application	Read all users' full profiles	Yes	⚠ Not granted for Clintel ... ***
VirtualAppointment.ReadWrite.All	Application	Read-write all virtual appointments for users, as authorize...	Yes	⚠ Not granted for Clintel ... ***

Recommended deployment: Provider setup via Powershell (each provider)

Install PowerShell in your environment

```
pwsh
Install-Module -Name PowerShellGet -Force -AllowClobber
Install-Module -Name MicrosoftTeams -Force -AllowClobber
Connect-MicrosoftTeams
```

You will be prompted to authenticate:



Either add:

```
New-CsApplicationAccessPolicy -Identity "AllowMeetingCreation" -AppIds "460f60b0-81d4-4fb7-acd3-a9c24dd8d584"
```

Or update:

```
PS /Users/clintel> Set-CsApplicationAccessPolicy -Identity "AllowMeetingCreation" -AppIds "ee9fe20f-b5ee-4111-b85d-fac7527cad6f", "460f60b0-81d4-4fb7-acd3-a9c24dd8d584"
PS /Users/clintel> Get-CsApplicationAccessPolicy -Identity "AllowMeetingCreation"

Identity   : Tag:AllowMeetingCreation
AppIds     : {ee9fe20f-b5ee-4111-b85d-fac7527cad6f, 460f60b0-81d4-4fb7-acd3-a9c24dd8d584}
Description :
```

```
Grant-CsApplicationAccessPolicy -PolicyName "AllowMeetingCreation" -Identity "3efbdd46-d280-4b0f-a414-1ff1f3dda63a"
```

Replace the Identity to the provider user Identity

The screenshot shows the user profile for Victor Hong in the Microsoft 365 Admin Center. The 'Object ID' field is highlighted with a red box, displaying the value 3efbdd46-d280-4b0f-a414-1ff1f3dda63a. Other visible details include the user principal name victor@clintel.onmicrosoft.com, creation date of 2 Aug 2023, and member status.

Each provider who can offer telehealth services needs to be granted the AllowMeetingCreation permission. A method to grant permission by group:

```
Connect-AzureAD
$groupMembers = Get-AzureADGroupMember -ObjectId "your-group-id-here" | Select-Object -ExpandProperty UserPrincipalName
```

```
foreach ($member in $groupMembers) {
    Grant-CsApplicationAccessPolicy -PolicyName "AllowMeetingCreation" -Identity $member
    Write-Host "Policy applied to $member"
}
```

Running example:

```

PS /Users/clintel> Connect-AzureAD
WARNING: To sign in, use a web browser to open the page https://microsoft.com/devicelogin and enter the code PU3XZU37E to authenticate.

Account                                Environment TenantId                                TenantDomain                                AccountType
-----                                -
victor@clintel.onmicrosoft.com AzureCloud  61804cb1-c176-461f-a013-41d40bd6e8c6 clintel.onmicrosoft.com User

PS /Users/clintel>
PS /Users/clintel> $groupMembers = Get-AzureADGroupMember -ObjectId "ac139435-9539-4b41-9d2d-b0ca14dc059b" | Select-Object -ExpandProperty UserPrincipalName
PS /Users/clintel> $groupMembers
nick@clintel.onmicrosoft.com
diego@clintel.onmicrosoft.com
ben@clintel.onmicrosoft.com
daniel@clintel.onmicrosoft.com
tim.macdonald@clintel.onmicrosoft.com
tom@clintel.onmicrosoft.com
sara@clintel.onmicrosoft.com
nico@clintel.onmicrosoft.com
test@clintel.onmicrosoft.com
victor@clintel.onmicrosoft.com
ema@clintel.onmicrosoft.com
krutik@clintel.onmicrosoft.com
PS /Users/clintel> foreach ($member in $groupMembers) {
>>   Grant-CsApplicationAccessPolicy -PolicyName "AllowMeetingCreation" -Identity $member
>>   Write-Host "Policy applied to $member"
>> }
Policy applied to nick@clintel.onmicrosoft.com
Policy applied to diego@clintel.onmicrosoft.com
Policy applied to ben@clintel.onmicrosoft.com
Policy applied to daniel@clintel.onmicrosoft.com
Policy applied to tim.macdonald@clintel.onmicrosoft.com
Policy applied to tom@clintel.onmicrosoft.com
Policy applied to sara@clintel.onmicrosoft.com
Policy applied to nico@clintel.onmicrosoft.com
Policy applied to test@clintel.onmicrosoft.com
Policy applied to victor@clintel.onmicrosoft.com
Policy applied to ema@clintel.onmicrosoft.com
Policy applied to krutik@clintel.onmicrosoft.com

```

- Get the Client ID and Client Secret:

Client ID is the application id and Client Secret generated by **Add a certificate or secret** link in app overview page.

Recommended: Set an expiry time of 24 months and appropriate calendar reminders prior to expiry.

CareRight Setup

Create the Data Producers

Once you have obtained your credentials, next action will be to create a new data producer.

System Administration > Workflow > Data Producers

Alternative deployment: Specify a single user in the API Endpoint URL [https://graph.microsoft.com/v1.0/users/\(object id\)](https://graph.microsoft.com/v1.0/users/(object id)), rather than <https://graph.microsoft.com/v1.0/users/>

Data producer

Name	<input type="text" value="Teams"/>
Producer*	<input type="text" value="Appointments"/>
Message Type*	<input type="text" value="TEAMS"/>
	<input checked="" type="checkbox"/> Enabled
Destination Host*	<input type="text" value="graph.microsoft.com"/>
Destination Port*	<input type="text" value="443"/>
Client Type	<input type="text" value="Select from list"/>

Credentials

Only applicable for JSON or OAuth2 endpoints

Client ID	<input type="text" value="460f60b0-81d4-4fb7-acd3-a9c24dd8d584"/>
Client Secret	<input type="text"/>
Authentication Url	<input type="text" value="https://login.microsoftonline.com/618a4cb1-c176-461f-a013-41d4...s/oauth2/v2.0/token"/>
Api Endpoint Url	<input type="text" value="https://graph.microsoft.com/v1.0/users/"/>
Scopes	<input type="text" value="https://graph.microsoft.com/.default"/>

Enabled Telehealth via Microsoft Teams for appointment types

System Administration > Appointment Types

To visit the main article click: [Appointment Types](#)

To configure the appointment type for telehealth system admin need to check **Telehealth Enabled** field. They can either create a new appointment type or modify an existing one.

Details

Code*	<input type="text" value="p01"/>
Description*	<input type="text" value="Telehealth"/>
Category	<input type="text" value="Consultation"/>
Duration (minutes)*	<input type="text" value="30"/>
Sort Order	<input type="text" value="1"/>
Background Colour	<input type="text"/>
Text Colour	<input type="text"/>
Associated Assessment Name	<input type="text" value="Select from list"/>
Cool Down Period (working days)	<input type="text" value="0"/>
Checklist	<input type="text" value="Select from list"/>
	<input type="checkbox"/> Enabled For Theatre
	<input type="checkbox"/> Disabled
	<input checked="" type="checkbox"/> Online Booking
	<input type="checkbox"/> Enable Assistant
	<input checked="" type="checkbox"/> Telehealth Enabled
	<input type="checkbox"/> Exempt Overlap Check

Note: We recommend setting up specific Telehealth consultation appointment types, so that in person appointments are not accidentally scheduled as Telehealth.

Appointment Email or SMS

System Administration > Correspondence > Appointment Email or SMS

When an appointment is published to Microsoft Teams, links are generated, but not yet accessible.

To share these links with the Patient, you will need to create an appropriate Appointment message (SMS or Email).

The variable to use in templates is **patient.teams_url**.

CareRight provides two default templates, Sms and Email.

CareRight default SMS template:

See the available [Documentation](#).

Used By

sms-appointment-telehealth

Code *

sms-appointment-telehealth

Description *

Telehealth Appointment Invite

Body

```
1 Hi {{patient.given_name}},
2 Your telehealth appointment is booked for {{appointment.start_time_12h}} on {{appointment.date}} with {{location.description}}, {{location.address1}}.
3 Join from Coviu:
4 {{patient.telehealth_entry_url}}
5 Join from Teams:
6 {{patient.teams_url}}
7 Please reply Y or Yes to confirm the appointment or N or No to cancel.
```

Script

SMS

Appointment

Logic

Loops

Math

Text

CareRight default Email template:

See the available [Documentation](#).

Used By

email-appointment-telehealth

Code *

email-appointment-telehealth

Description *

New Telehealth Appointment

Subject *

[CareRight] New Telehealth Appointment

Body

```
<p>Hi {{patient.given_name}}<br />
You have a new telehealth appointment {{{appointment.date}}} ({{{appointment.start_time}}})<br />
Join from Coviu:<br />
<a href="{{patient.telehealth_entry_url}}">{{patient.telehealth_entry_url}}</a><br />
Join from Microsoft Teams:<br />
<a href="{{patient.teams_url}}">{{patient.teams_url}}</a><br />
Call {{appointment.location.phone}} if you cannot attend.</p>
<p>Regards,<br />{{location.display_name}}</p>
```

☒ Send meeting invite (Cal attachment)

See the available [Documentation](#).

iCal Summary

1 {{{patient.title}}} {{{patient.given_name}}} {{{patient.family_name}}} Appointment

iCal Description

```
1 Status: {{{appointment.status}}}
2
3 Patient: {{{patient.display_name}}}
4
5 Provider: {{{provider.display_name}}}
6
7 Appointment Type: {{{appointment.appointment_type_description}}}
8
9 Date: {{{appointment.date}}}
10 Time: {{{appointment.start_time}}}
11 Covi Join: {{{patient.telehealth_entry_url}}}
12 Microsoft Teams Join: {{{patient.teams_url}}}
```

Enable Dashboard view:

System Administration > Appointments > User Interface

We recommend enabling **Dashboard Show Appointments** for easy access by providers to their appointments.

User Interface

Dashboard Show Appointments

true

Default Calendar View

All Providers

Appointment List Status Filter Default

Active Appointments

Calendar Browser Tab Name

Default

Waitlist Display Age

false

Staff Experience

Create an appointment

When an appointment is created, it is published to the Microsoft Teams portal which may take a short period. When it is successfully published, you can verify this via **Appointments > Details**.

You will see the participants and links:

Dr Victor Hong

View Patient

Edit Appointment

New Correspondence

Appointment

Date

27/09/2024

Start Time

04:00 PM

Duration

30

Patient

Clintel Test

Provider

Victor Hong

Location

Clintel

Session Name

test

Session Type Category

Consultation

Status

Booked

Condition

Unconfirmed

Appointment Type

C - Telehealth

Comments

Created By

Victor Hong, 27/09/2024 10:22 AM

Microsoft Teams Details

Participant	Participant Type	Vendor	External Participant	Entry Url
Clintel Test	Patient	teams	MSozZWziZGQ0Ni1kMjgwLTRiMGYyYTQxNC0xZ...	https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZDc1N2NiYjktZDM2ZC00Zm...
Dr Victor Hong	Provider	teams	MSozZWziZGQ0Ni1kMjgwLTRiMGYyYTQxNC0xZ...	https://test7.use.careright.com.au/patients/12/appointments/47/join_telehealt...

Updating or cancelling an appointment

If you update or cancel an appointment it flows through automatically to the Microsoft Teams platform.

Updates flow through automatically to the Microsoft Teams platform.

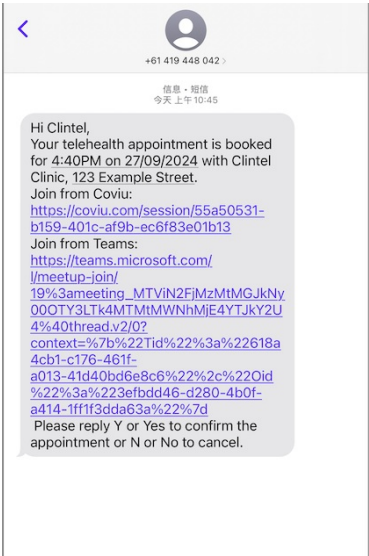
If required, you may need to inform the patient of any changes, if automated correspondence has already been sent.

Patient Experience

Receive the Link

Once an appointment has been created patient will get secure link to join the session either by SMS or email. If this sent by an email, this will also typically include an iCal invite. Patients can add this to their calendar with one to two clicks on Android or other modern platforms.

Example SMS:



Email Example

Sep 27 Fri

Clintel Test Appointment

When

Fri Sep 27, 2024 4:40pm – 5:10pm (ACST)

Where

123 Example Street CANBERRA ACT 2600

Who

Clintel Appointment System*

Add to calendar >

Agenda

Fri Sep 27, 2024

11:30am

Deploy_test3

11:45am

Slackup

4:40pm

Clintel Test Appointment

No later events

Hi Clintel,

You have a new telehealth appointment (27/09/2024 16:40)

Join from Coviu:

<https://coviui.com/session/55a50531-b159-401c-af9b-ec6f83e01b13>

Join from Microsoft Teams:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MTVIN2FjMzMtMGJkNy00OTY3LTk4MTMmMWNhMjE4YTJkY2U4%40thread.v2/0?context=%7b%22Tid%22%3a%22618a4cb1-c176-461f-a013-41d40bd6e8c6%22%2c%22Oid%22%3a%223efbdd46-d280-4b0f-a414-1ff1f3dda63a%22%7d

Call if you cannot attend.

Regards,

One attachment • Scanned by Gmail

invite.ics

Download

Appointment

Friday, September 27 · 3:00 – 3:30pm

123 Example Street CANBERRA ACT 2600

Status: Booked

MRN: 000012
Patient: Clintel Test

Provider: Dr Victor Hong

Appointment Type: Telehealth
Session: test
Session Type: Telehealth

Date: September 27, 2024
Time: 15:00

Join CoviU:
http://test7.use.careright.com.au/patients/12/appointments/46/join_telehealth_session?vendor=coviu

Join Microsoft Teams:
http://test7.use.careright.com.au/patients/12/appointments/46/join_telehealth_session?vendor=teams

Dr Victor Hong Appointments - CareRight

Joining the session

Waiting area:

When the scheduled session is ready to commence, the patient proceeds to a waiting area

Hey Clintel Test! Hang tight—someone should admit you shortly.

Microsoft Teams meeting

No camera is connected

Computer audio ☒

Customised Setup

Microphone ☒ Speaker ☐

Phone audio ☐

Don't use audio ☐

Cancel

Join now

Provider Experience

Join the Telehealth Session

1. From the Dashboard

We recommend enabling **Dashboard Show Appointments** for easy access by providers to their appointments. Providers

can one-click join the session from dashboard.

Click on the drop down option on the particular appointment system presents the option **Join Telehealth Session**

Dashboard

Enter Patient name ☐ Include inactive patients? [Advanced Search](#)

Friday, Sep 27 Appointments (Today) < Today

Time	Details	Patient
13:20	Clintel Clinic C - Telehealth Victor_saml_Test Hong	Clintel Test 0415100919 1/0
15:00	Clintel Clinic C - Telehealth Victor_saml_Test Hong	Clintel Test 0415100919 1/0

Form

- Edit
- Details
- Create Invoice
- Correspondence
- Join Coviu Session
- Join Microsoft Teams Session

2. From the Patient Record

1. From the dashboard.
2. Search for a patient.
3. Click show.
4. Click on the appointment from left side menu.
5. Click on the action for particular appointment.
6. Click on the **Join Telehealth** option from drop down.

Clintel Test [My Health Record](#) [Medication Chart](#)

Facility: Clintel MRN: 000012 CRN: Home: 111 cat street, ABERFOYLE PARK SA 5159
Female , aged 24 years , born on April 28, 2000 , currently admitted to St CareRight Hospital . Mobile Phone: 0415100919

[Dashboard](#) / [Patients](#) / [Clintel Test](#)

Current Appointments

Date/Priority	Appointment Type	Provider/Location	Status	Note	Case	Created
27/09/2024 01:20 PM	Telehealth	Victor_saml_test Hong Clintel Clinic	Booked		Victor_saml_Test Hong	27/09/2024
27/09/2024 03:00 PM	Telehealth	Victor_saml_test Hong Clintel Clinic	Booked		Victor_saml_Test Hong	27/09/2024

Actions

- Edit
- Rebook
- Join Coviu Session
- Join Microsoft Teams Session

3. From Appointment details

[View Appointments > Details](#)

[View Patient](#) [Edit Appointment](#) [New Correspondence](#)

Appointment

Date 27/09/2024
Start Time 01:20 PM
Duration 30
Patient Clintel Test
Provider Victor_saml_test Hong
Location Clintel
Session Name
Session Type Category Consultation
Status Booked
Condition Unconfirmed
Appointment Type C - Telehealth
Comments
Created By Victor_saml_test Hong, 27/09/2024 09:15 AM

Microsoft Teams Details

Participant	Participant Type	Vendor	External Participant	Entry Url
Clintel Test	Patient	teams	MSozZWZiZGQ0Ni1kMjgwLTJhMjYyYQxNC0xZ...	https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZGYxZmlzOWYtYmQ5YS00MG...
Victor_saml_test Hong	Provider	teams	MSozZWZiZGQ0Ni1kMjgwLTJhMjYyYQxNC0xZ...	https://test7.use.careright.com.au/patients/12/appointments/45/join_telehealt...

Accessing your calendar feed from Outlook or Google Calendar

Recommended article: [Accessing Calendar Feed](#).

Generate Secure Link

Victor_saml_test Hong's iCalendar

- Link includes secure token - **do not share this with anyone**.
- Calendar feed includes appointment information. Ensure your organisation has appropriate security for calendaring applications in place
- Link will expire almost 5 years

[iCalendar Feed](#)

Add to calendar application

- [Google Calendar](#)
- [Outlook](#)