



# Delivering Great Communications Experiences

Jornadas Computação Científica 2022

Cláudio Moreira - Portugal Managing Director

1 de junho de 2022





## Líder Global em Comunicações Empresariais

As soluções de comunicação, colaboração e Contact Center da Mitel proporcionam às organizações a flexibilidade e escolha de que precisam para prosperar, tanto hoje como à medida que caminham para o futuro.

- **Fundação em 1973**
- **Mais de 2,600 colaboradores**
- **Mais de 4,000 parceiros canal**
- **Mais de 1,200 patentes & aplicações**



# Mitel *HOJE*

**#1**

NO TOTAL DE  
UTILIZADORES EM  
CLOUD em 9 anos  
consecutivos

**35M+**  
UTILIZADORES  
GLOBAIS  
em mais de  
100 PAÍSES

**TOP 3 UC PROVIDER**

em mais de 10 PRINCIPAIS  
MERCADOS

**#1**

em DECT  
WORLDWIDE

**#3** EM

CONTACT  
CENTER  
sistemas  
disponibilizados  
globalmente

**#2** EM

Cloud Privada

**7.3M+**

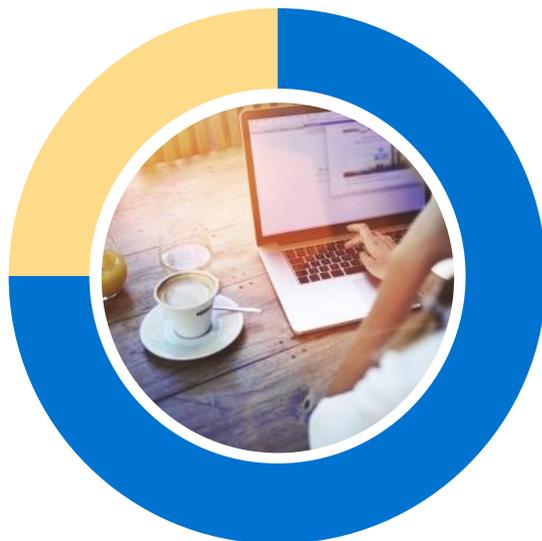
UTILIZADORES  
CLOUD  
MUNDIALMENTE

**#3**

EM ON-PREMISE  
PBX  
MUNDIALMENTE

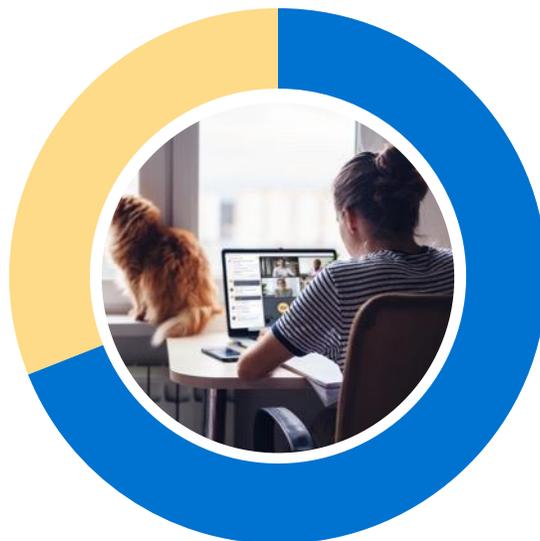


# Trabalho parece diferente hoje



**75%**

das organizações esperam que as **operações sejam fundamentalmente diferentes** no futuro



**69%**

das organizações estão agora mais **dependentes da tecnologia** para colaborar



**50%**

das organizações sentem que **produtividade dos empregados & agilidade nos negócios, são agora mais importantes** na tomada de decisão organizacional

**Onde trabalhamos, como trabalhamos, e as formas de nos conectarmos mudaram... E AINDA ESTÃO A EVOLUIR**



Acreditamos que

**comunicações eficientes  
potenciam organizações**

**PRÓSPERAS**



# Uma experiência moderna de **COMUNICAÇÕES UNIFICADAS**



## Comunicações

- SMB Call Platforms
- Enterprise Call Platforms
- Terminais e dispositivos



## Apps Colaboração

- Conferência
- Mensagens
- Chat
- Vídeo
- Mobilidade / Teletrabalho



## Contact Center

Software de Contact Center para todas as implementações, sectores e dimensões

APIs & Integração



**CLOUDLINK**



# Mitel CloudLink – Uma breve introdução

Plataforma de Cloud nativa construída em Amazon AWS

Plataforma CloudLink

API-First, todos os serviços definidos de forma nativa como REST APIs (Swagger)

Mitel Apps



MOM/MOWA  
Meetings  
Mitel One  
MiCollab Chat  
MiCC Business Web chat  
Subscriptions

CloudLink Gateway



MiVoice Office 400  
MiVoice 5000  
MiVoice Business  
MiVoice MX-ONE



3<sup>rd</sup> Party Developers

Plug-ins & custom apps  
API specifications  
Developer Portal  
Developer Forum





# CLOUDLINK DEVELOPER PROGRAM



## O que é o Developer API Program e objetivos?

**Developer API (DAPI) Program é um portal self-service que contém todos os recursos necessários para um programador construir aplicações e integrações personalizadas**

DAPI Program:

1. Fornecer acesso aos microserviços do CloudLink - RESTful web services (APIs)
2. Permitir que os parceiros construam e implementem aplicações e integrações personalizadas desenvolvidas nas APIs
3. Melhorar a retenção de implementações existentes, permitindo aos parceiros adicionar funcionalidade e integrar-se abertamente com outras plataformas



# EXEMPLOS SOLICITADOS POR CLIENTS E PARCEIROS MITEL

- ✓ Chatbots para ser usado por utilizadores UC (dentro de uma empresa)
  - Para uso interno em RH, suporte técnico, formação, etc.
- ✓ Notificações simples via TTS, email, SMS, ou XML mensagens para telefones/apps
  - ITSM/ITOM use cases
- ✓ Screen pop em aplicações CRM
- ✓ Encaminhamento de chamadas personalizadas
- ✓ Park and page para o retalho
  - Encaminhamento flexível de chamadas e integração com sistemas de paging, bem como mensagens funcionários
- ✓ Aplicações de cuidados de saúde para agendamento e comunicações
- ✓ Integração de eventos IoT para utilizadores de UC via interface de chat
- ✓ Integração de Social Media no chat



# Developer Portal



# SUPERCHARGE YOUR APPLICATIONS

Create applications and services that integrate with the power of Mitel

Mitel release v2.0.0 of the Postman I

[Learn More](#)

### Telephony

#### Media

Media Services API is used to manage calls on both the cloud call control and premise PBX systems.

[View API](#)

#### Presence

Presence API is used for managing presences. An entity can have a variety of presences.

[View API](#)

### Messaging

#### Conversations

Conversations API is used to manage streams (topic based), one-on-one, and group conversations.

[View API](#)

#### Notifications

Topic based notification system. This service's responsibility is to distribute notifications over various channels to subscribers.

[View API](#)

### Administrative

#### Admin

The administration service allows for the management of tenants, users and services which are then provided access to CloudLink platform microservices.

[View API](#)

#### Authentication

A loosely OAuth 2.0 compliant authentication service used to obtain bearer tokens for use with the CloudLink Platform micro-service APIs.

[View API](#)



# Developer Portal – Documentação API

Search...

Authentication

Spec >

Webhook

Conversation ▾

GET Get conversations

POST Create a conversation

GET Search resources under conversations

GET Get a conversation

PUT Update a conversation

DEL Delete a conversation

POST Create conversation transcript

Message >

Participant >

Attachment >

Status >

## Create a conversation

Creates a conversation with the provided body parameters.

To create a stream: `{"name": "atopic", "stream": true}`

To create a direct or group private conversation: `{"participants": ["jim@example.com", "sam@example.com"]}` Streams are created with a unique name while direct is created with participants (do not provide a name, else a 400 is returned). To add participants to a stream use the participants resource. For direct conversations that already exist, a 200 will be returned with the conversation in question.

AUTHORIZATIONS: [cloudlink-authorizer](#)

REQUEST BODY SCHEMA: `application/json`

### Conversation POST request object

name	string <= 100 characters	Only applies to stream based conversations. Blank for direct conversations
description	string <= 1000 characters	Only applies to stream based conversations. Blank for direct conversations
languageCode	string <sup>[a-z]{2}-[A-Z]{2}</sup>	Only applies to stream based conversations. Blank & Ignored for direct conversations
stream	boolean Default: <code>false</code>	Stream is equal to a topic based conversation
thumbnailUrl	string <uri>	Only applies to stream based conversations. Blank & Ignored for direct conversations
visibility	string Enum: <code>"PUBLIC"</code> <code>"PRIVATE"</code>	Visibility of this conversation. Only applies to stream based conversations. Blank for direct conversations. PRIVATE streams are invite only and PUBLIC allow end users to join

POST /conversations

Request samples

Payload

Content type  
`application/json`

```
{
  "name": "string",
  "description": "string",
  "languageCode": "string",
  "stream": false,
  "thumbnailUrl": "http://example.com",
  "visibility": "PUBLIC",
  "hidden": true,
  "generateSystemMessages": false,
  "archived": false,
  "participants": [
    "string"
  ],
  "originalParticipants": [
    + { ... }
  ],
  "accessCode": "string"
}
```

Response samples

200

201



# Developer Portal – Guias & Tutoriais

## CONVERSATION API

### Create Stream Conversation

Creating a basic, functional chat conversation.

**Stream** - Commonly known as a 'group chat'.

**Direct** - A private chat between two specific users.

If you haven't already, we recommend the following tools:

- [Postman](#) to make the API calls (a Postman collection is available).
- [MiVoice Office Web Application](#) (MOVA) to test the API.

Note: The screenshots from Postman use the following headers:

#### Step 1 - Get User Info

The very first thing you will need to do, is to get a token.

Authentication / Token

POST `{{(auth_url)}/token`

Params Authorization Headers (8) Body

none form-data x-www-form-urlencoded

KEY

- grant\_type
- username
- password
- account\_id

Key

### Introduction & Overview

An overview of CloudLink and relevant API concepts, including example use cases.

Visit

### Getting Started

A guide to the resources you'll need to start working with the Mitel API, whether you're new to APIs altogether, a senior developer, or in a services/sales role.

Visit

### Building an API Call

Key information about working with the CloudLink API, including authorization information and guidance on how to structure a complete API call.

Visit

### API Guides

How-to guides for each of the CloudLink APIs. Learn how to get started with a particular API, make use of its various functions, and understand key concepts.

Visit

### Example Use Cases

Several examples of solutions that can be built by leveraging the power of the CloudLink API.

Visit

### Developing on the API

Information about best practices, performance management, and app deployment.

Visit

### Downloads

Useful files and libraries, including a Postman library.

Visit

### Tutorials

Tutorials for working with and developing on the CloudLink API.

Visit

### Support

Support information for development of your application and post-deployment assistance.

Visit

## Notification API Guide

Notification API



budd.renaud Third Party API Program Manager

5 Apr '21

At first glance, the Notification API seems confusing and complicated. When you take a closer look, though, we're here to help you understand it.

though, we're here to help you understand it.

Information about specific events (e.g., a user logging in) that you might want to be notified of. The general idea is that you can create a notification (or other APIs) uses the Notification API to create an action, then the API looks for that Publication and sends the notification.

at API

When an event occurs, then your client application can be notified.

Most custom apps or services use it.

You can carry out an action, and you can let the Notification API send you notifications. You can be notified of that event and the associated publication. You can also create publications.



# Developer Portal – Comunidade

Category Topics

## News & Announcements

The News & Announcements category is where you can find the most important information about recent and upcoming updates to the CloudLink API program, and the API itself.

## General

The general category is an area where you can post questions and discuss general topics. Specific categories are available for each API, if you wish to discuss something more specific.

## Authentication API

Tokens! Get your fresh hot tokens here! Discuss the Authentication API here.

## Admin API

When life is out of control, you can always stay in control of your environment. Discuss the Admin API here.

## Chat API

New API, who dis? Discuss the Chat API here.

## Media API

Why am I always muted? Can you hear me now? Discuss the Media API here.

Authentication API ▾ Latest Top  + New Topic

Topic

Topic	Replies	Views
 Authentication API Guide The Authentication API is a loosely OAuth 2.0 compliant authentication service that grants tokens that allow access to the various Mitel APIs. It's basically the bouncer of the Mitel API Club. It doesn't care who you know... read more	1	160
   About the Authentication API category Tokens! Get your fresh hot tokens here! Discuss the Authentication API here.	2	3
Authenticate two Mitel Application in one go with different client ID	1	38
Pre Registered Redirect URL	1	43
SSO between Dev CloudLink Env and Azure AD	5	62
X Frame Options is set to deny during SSO login	4	56





**Claudio Moreira**

Managing Director | Helping customers,  
providing sophisticated, custom communicati...



# OBRIGADO!

**Cláudio Moreira - Portugal Managing Director**



claudio.moreira@mitel.com



+351 96214726500



<https://www.linkedin.com/in/claudiomoreira/>