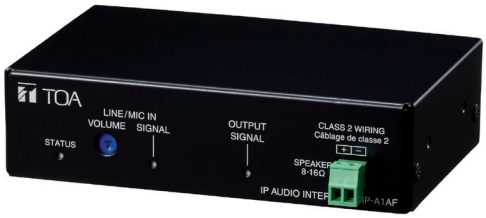
CyberTwice



TechNote: TOA IP Audio Systems and CyberGate

Version: 1.0.1 ENG
Date: 10-05-2023

Configure TOA IP Audio Systems for the CyberGate service

CyberGate

Microsoft Teams is the hub for team collaboration in Microsoft Office 365 that integrates people, content, conversations and tools your team needs. Via the CyberGate application that runs in Microsoft Azure you can now connect TOA IP Audio Systems to your Microsoft Teams environment. Microsoft Teams users can set up calls to TOA IP Audio products – with 2-way audio – on the Teams desktop client, Teams desk phone or Teams Smartphone app.

CyberGate is a subscription based Software-as-a-Service (SaaS) hosted in Azure. With CyberGate there is:

no need to setup a hosting environment,
no need to download or install any software from CyberTwice or a 3rd party,
no need to install additional Virtual Machines,
no need for a Session Border Controller (SBC) or extra licenses for your existing SBC
no need for to get additional PSTN like phone numbers for your SIP intercoms.

! Note: For instructions on how to purchase and configure the CyberGate service, see our Tech Note: 'Connect a SIP Intercom to MS Teams using the CyberGate service'. (https://support.cybertwice.com/knowledgebase.php?article=6***) !***

TOA IP Audio Systems

For this document the following TOA IP Audio equipment is used to connect to the CyberGate service (from now on named 'CyberGate').

This document applies to the following TOA devices:

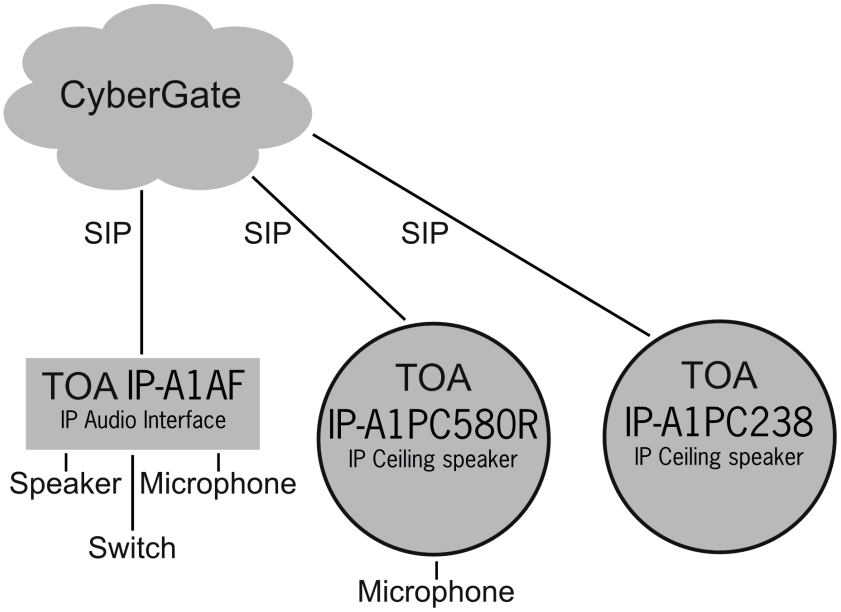
- TOA IP Paging Gateway IP-A1PG
- TOA IP Audio Interface IP-A1AF
- TOA IP Ceiling speaker IP-A1PC238
- TOA IP Ceiling Speaker IP-A1PC580R

The following scenarios are tested:

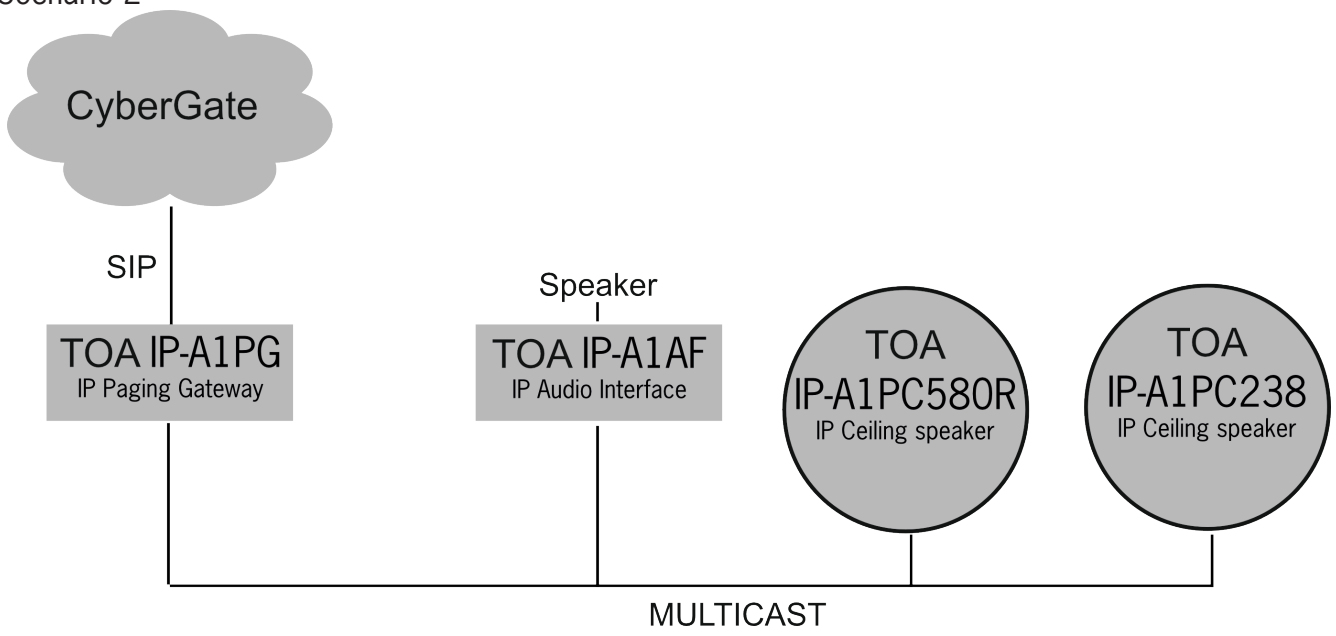
1. The IP Audio Interface and the two IP Ceiling speakers each have an individual SIP connection to CyberGate. The IP Audio Interface has an attached speaker, microphone and switch, so initiating calls to Teams using the switch is also possible (it will act as an intercom)
2. The IP Paging Gateway has a SIP connection to CyberGate and uses Multicast to connect to the IP Audio Interface and the two IP Ceiling speakers (zone-paging)

! Note: In scenario 2 (using the IP Paging Gateway) the audio is Paging only (one-way audio). Scenario 1 als supports audio from a microphone to Microsoft Teams (two-way audio). !

Scenario 1



Scenario 2

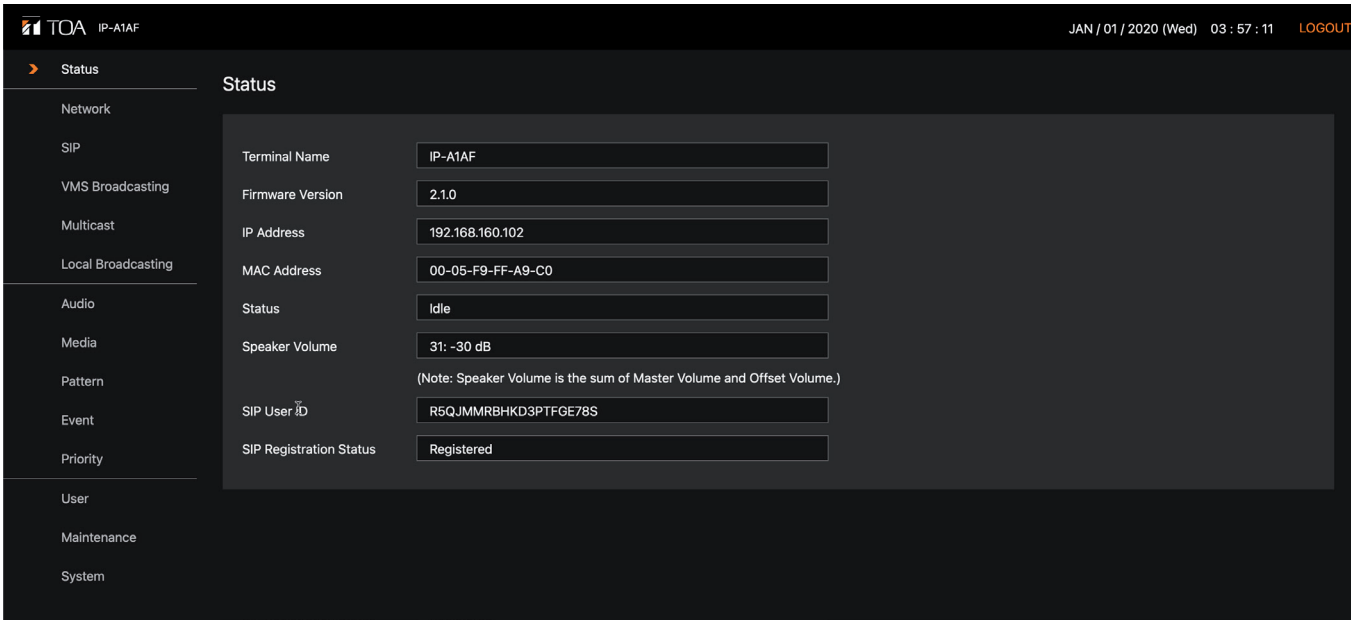


The first section of this manual (in RED) describes scenario 1, direct calling to an IP Speaker or IP Audio interface.
The second section of this manual (in GREEN) describes scenario 2, configuration of the IP Paging Gateway to be able to call to different other IP Paging devices using DTMF (zone-paging).

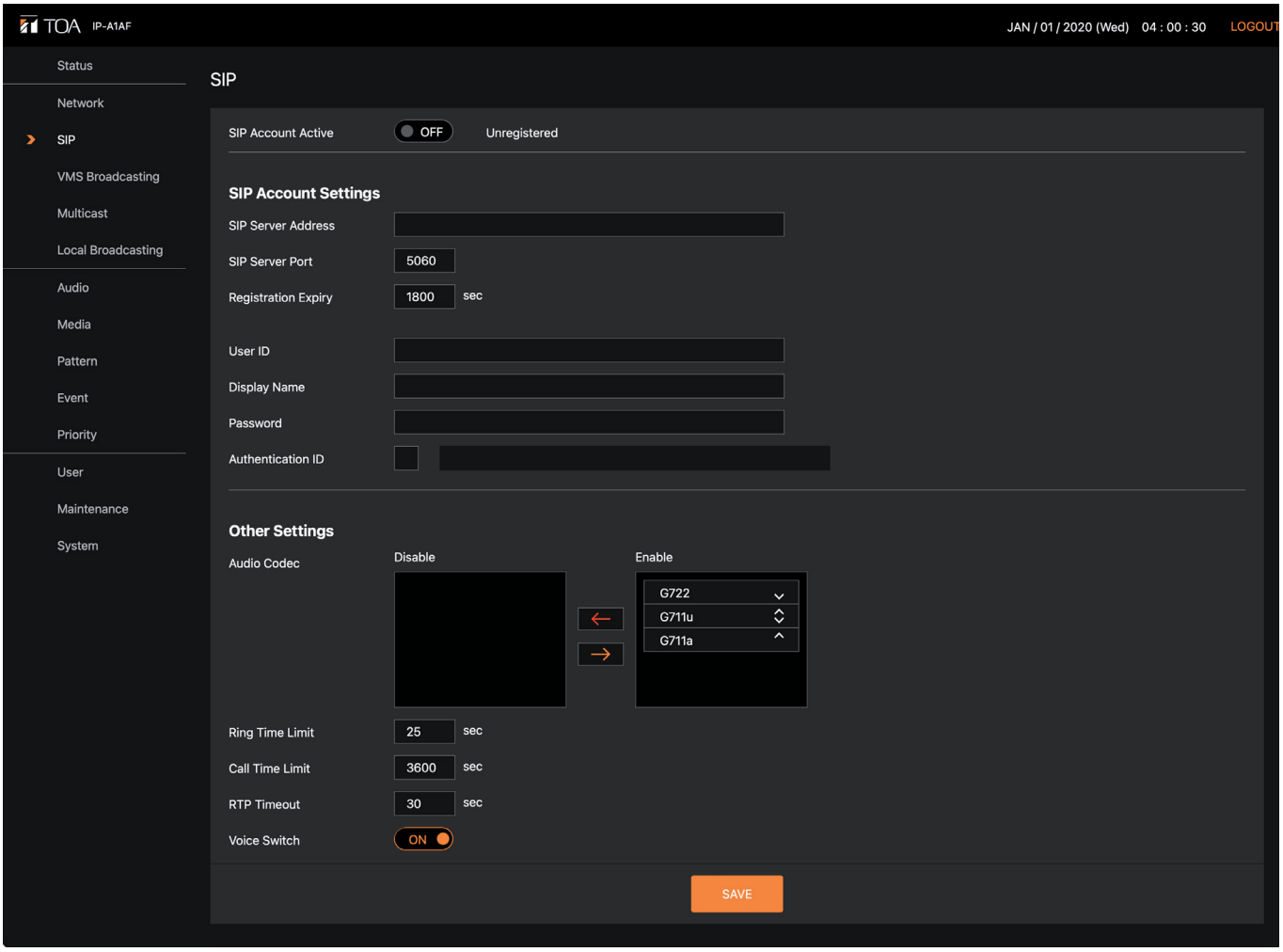
Follow the next steps to configure the TOA to connect it to CyberGate.

Connect the TOA

Connect the TOA to the network, power it on and open a webbrowser to its IP-address.
Sign in with the configured or supplied password of the TOA.

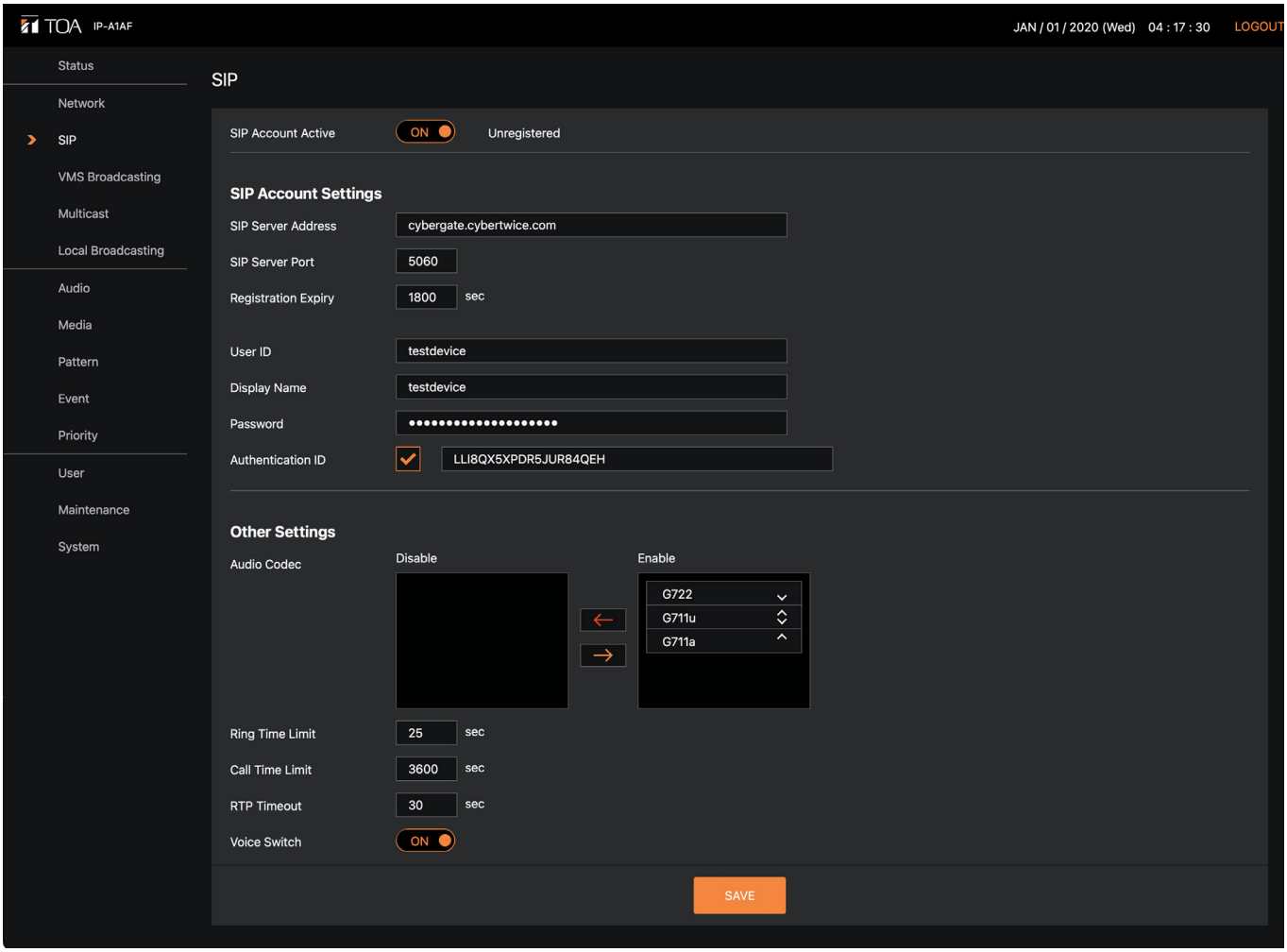


Navigate to the SIP menu.



Provide the following information:

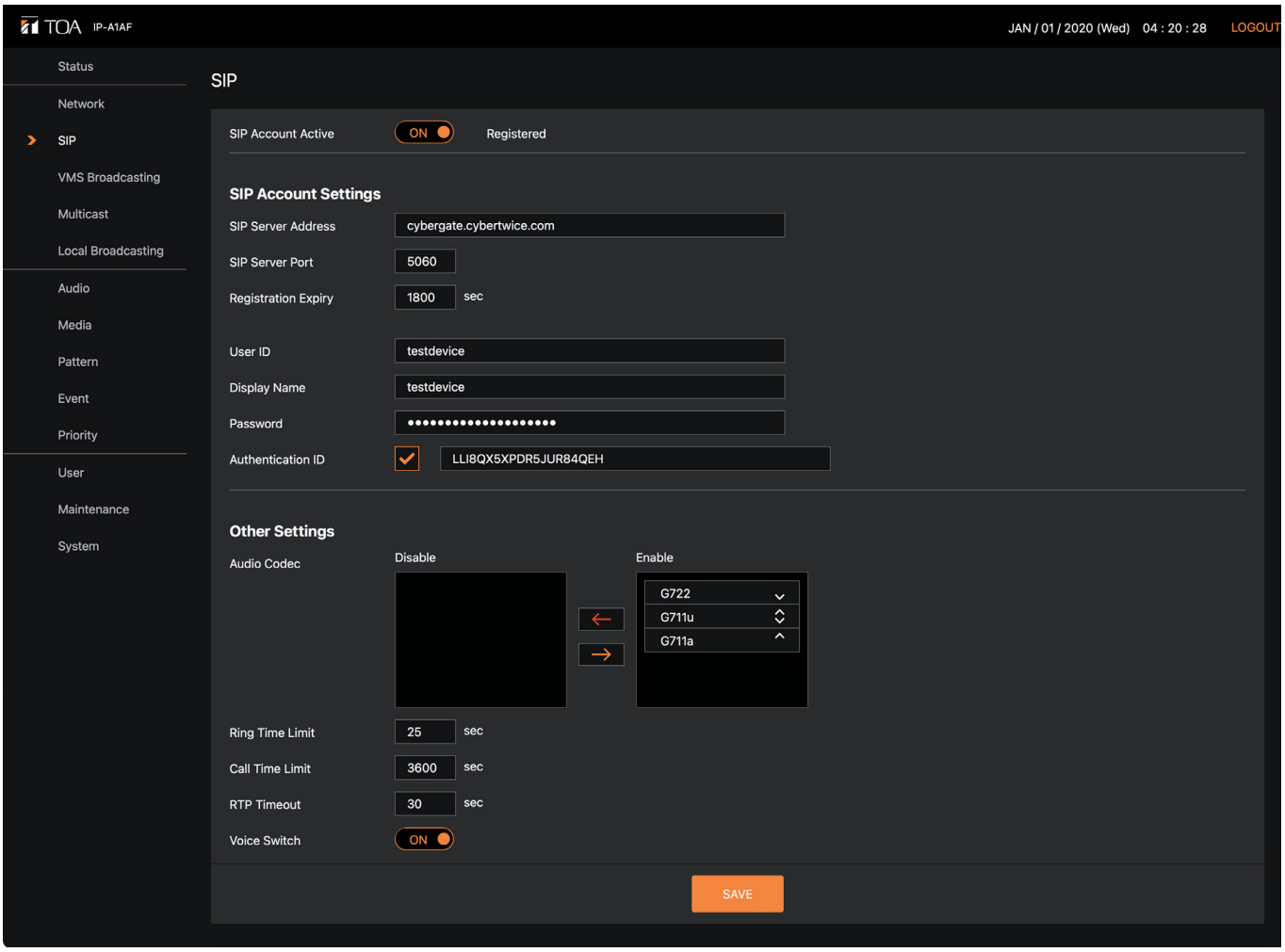
SIP Account Settings	
SIP Server Address	cybergate.cybertwice.com
User ID	Choose a User ID that describes this device (in this example ‘testdevice’)
Display Name	Same as the User ID
Password	Use the Password provided by the CyberGate Management Portal
Authentication ID	Use the Username provided by the CyberGate Management Portal



Click the orange Save button when done.

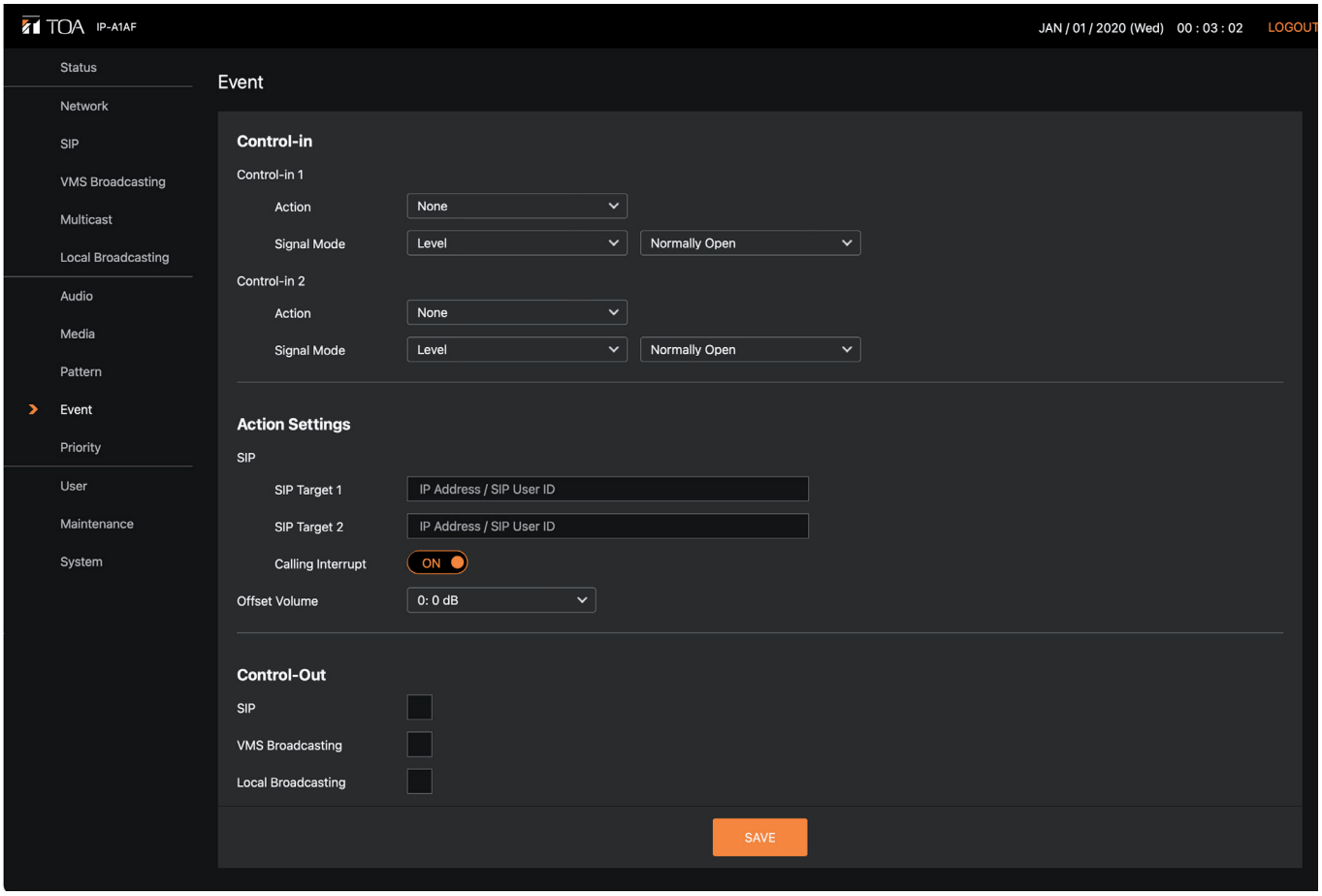
Before the settings are active, the TOA has to reboot (see the Maintenance menu for the 'Reboot' button).

After reboot, the SIP status should be changed to Registered.



If an external switch is connected to the TOA, configure a TOA Event to trigger an outgoing call.

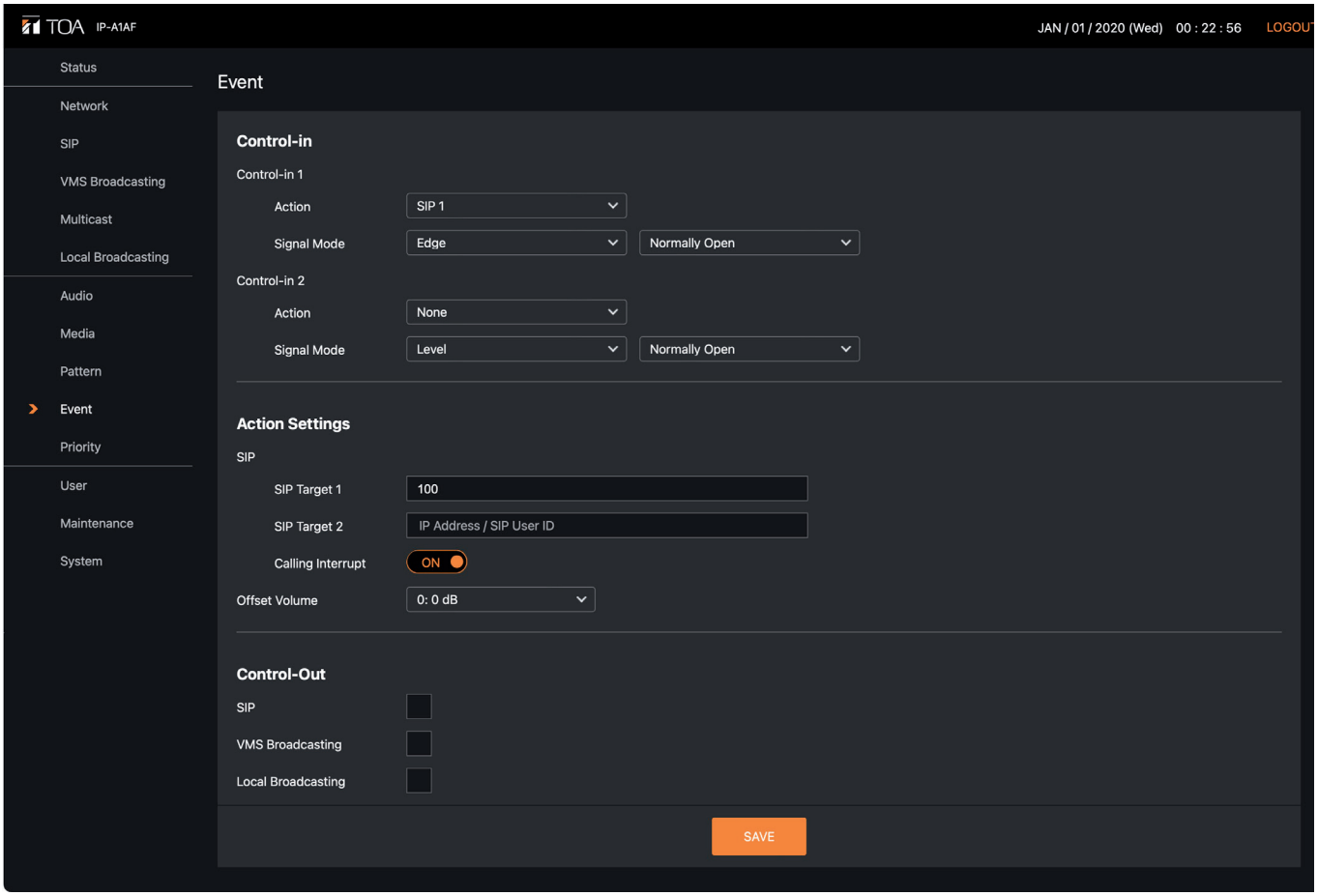
Navigate to the Event menu.



Provide the following information:

Control-in	
Control-in 1 Action	cybergate.cybertwice.com
Action Settings	
SIP Target 1	100

SIP Target 1 is the destination address to call as soon as the switch connected to Control-in 1 is pushed.
The configured number '100' has to correspond with a Multi-ring group called '100', configured in the CyberGate admin portal. This Multi-ring group can contain one or more Teams users in your organisation. As soon as this Multi-ring group is dialed, all Teams users in this Multi-ring group will be called simultaneously, the first one to answer will be connected to the TOA.



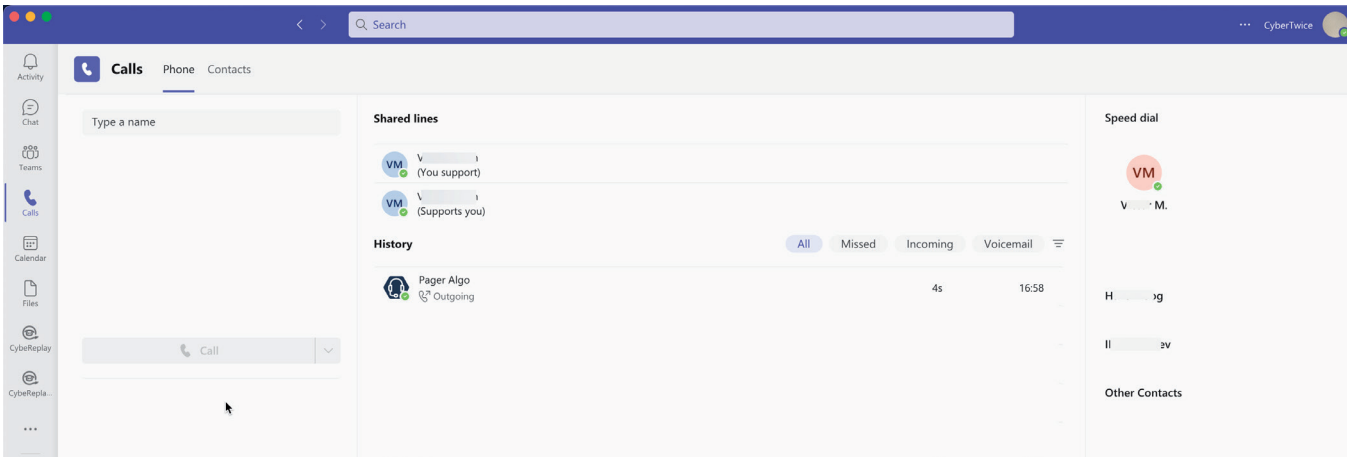
Click the orange Save button when done.

Before the settings are active, the TOA has to reboot (see the Maintenance menu for the 'Reboot' button).

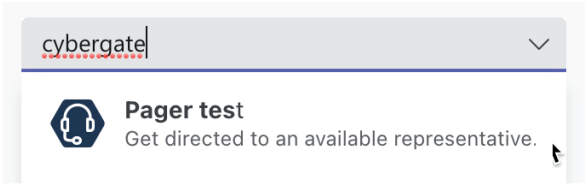
The basic configuration of the TOA for use with CyberGate is done!

Before calls can be initiated from Microsoft Teams *to* the TOA or from the TOA to Teams, additional configuration in the CyberGate Admin portal is necessary. Please see the blue section of this manual for instructions on how to configure the Management portal.

To initiate a call from Microsoft Teams, login to Microsoft Teams and navigate to the 'Calls' menu.



You can either type the (Display)name of the TOA directly in the call field (at 'Type a name') or search for 'cybergate'.



It will show all of your CyberGate Devices. Select the Pager to call and click the blue 'Call' button.

A call to the TOA will be initiated and the TOA will answer automatically.

Configuring a TOA IP Paging Gateway

The TOA IP Paging Gateway can broadcast audio from Microsoft Teams to different TOA IP Paging devices using Multicast.

Each TOA IP Paging device has its own Multicast address. During the Teams call you can select the desired TOA Paging Device using DTMF keys in Teams.

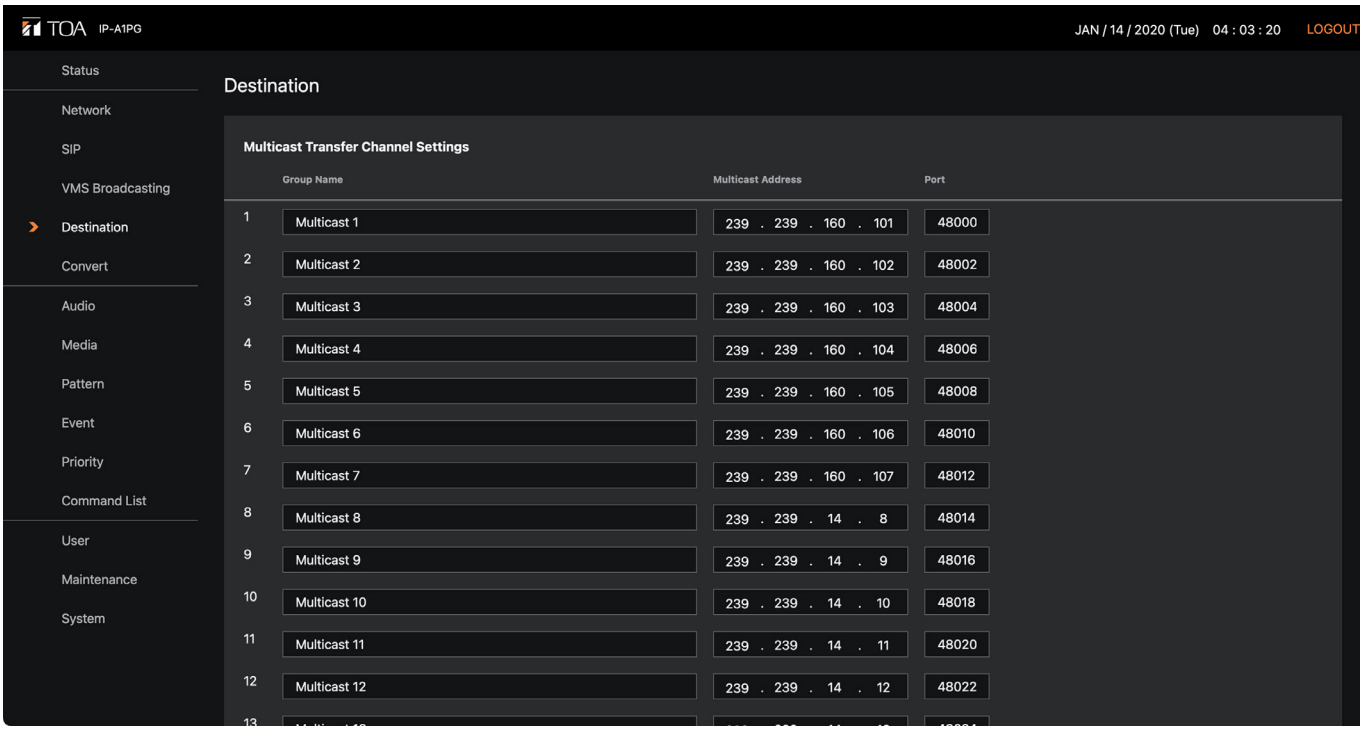
First step is to configure the different devices in your TOA IP Paging Gateway.

Register the TOA IP Paging Gateway the same way as described in the first section of this manual. After that, navigate to the Destination menu.

Modify the following information:

Destination	
Group Name	Provide a name for the Multicast group (in this example the names re-mained default 'Multicast 1, Multicast 2 etc)
Multicast Address	Provide the correct Multicast address for this Multicast group *

* Each IP Paging Device has its own Multicast address. To address a specific IP Paging Device, use its Multicast address in this overview.

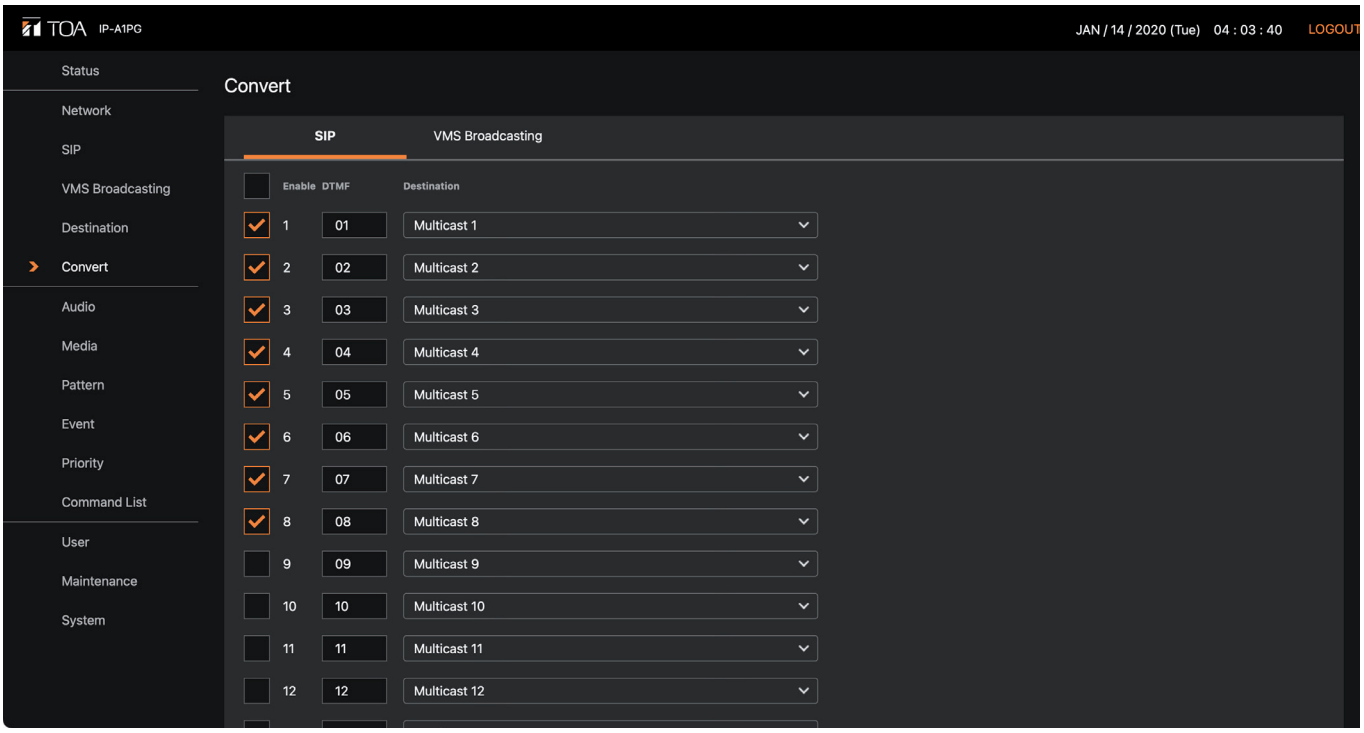


Click the orange Save button when done.

Navigate to the Convert menu.
Use the settings in this menu to configure a DTMF key combination for a specific IP Paging Device (zone-paging).

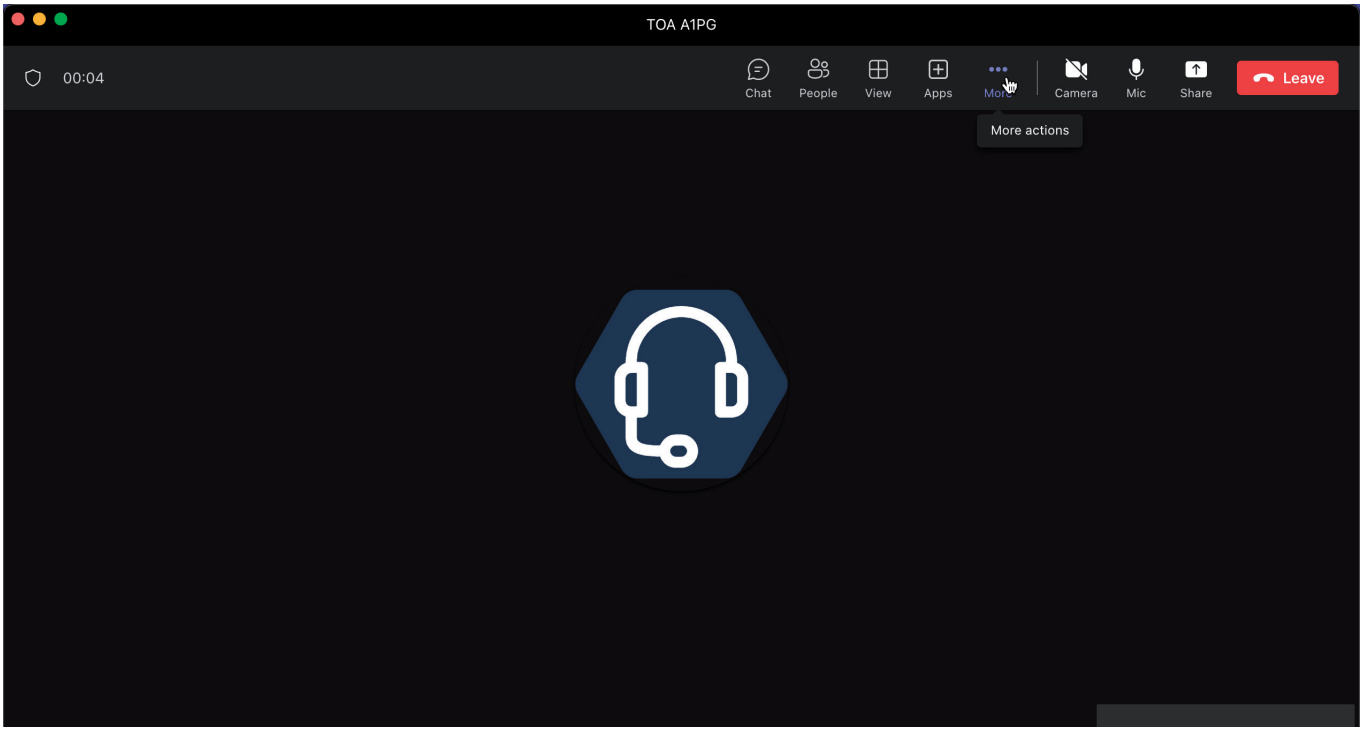
Modify the following information:

SIP	
Enable DTMF	Enable DTMF for a specific Multicast group
DTMF	Select the DTMF key combination

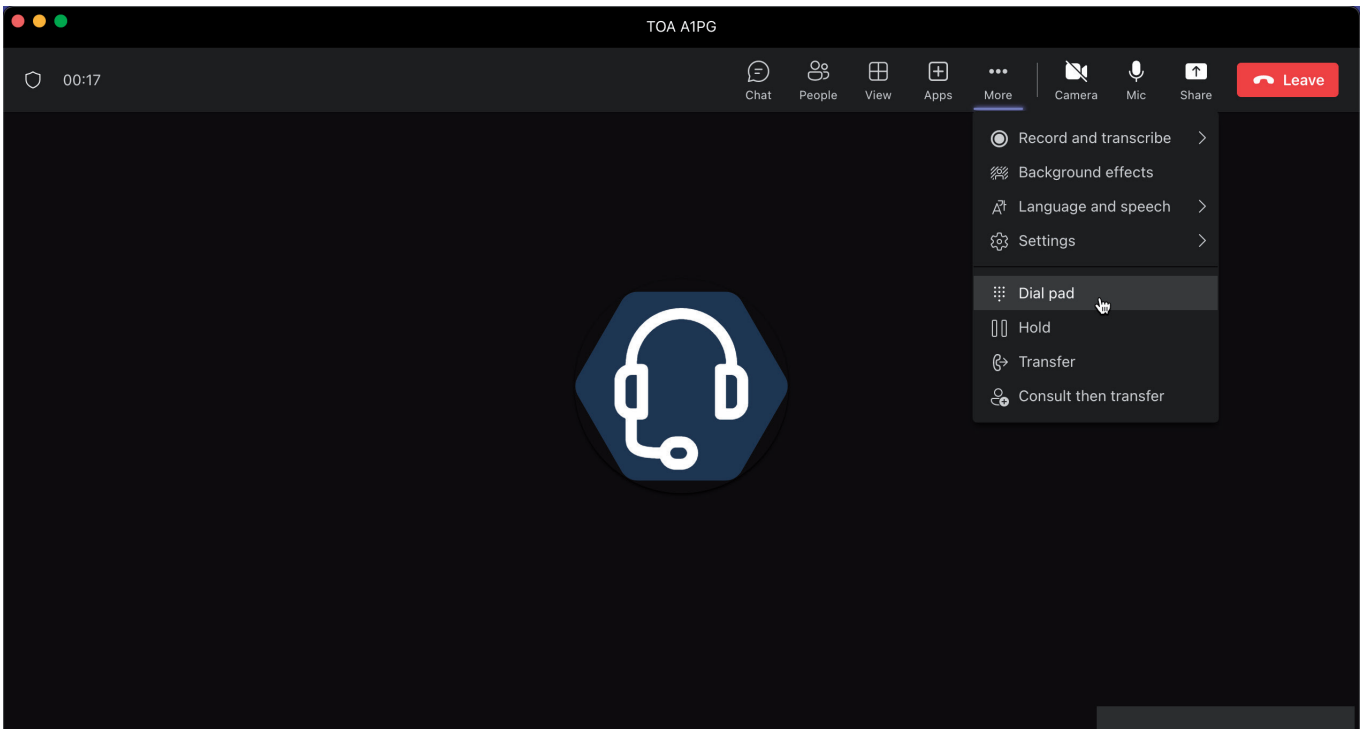


Click the orange Save button when done.

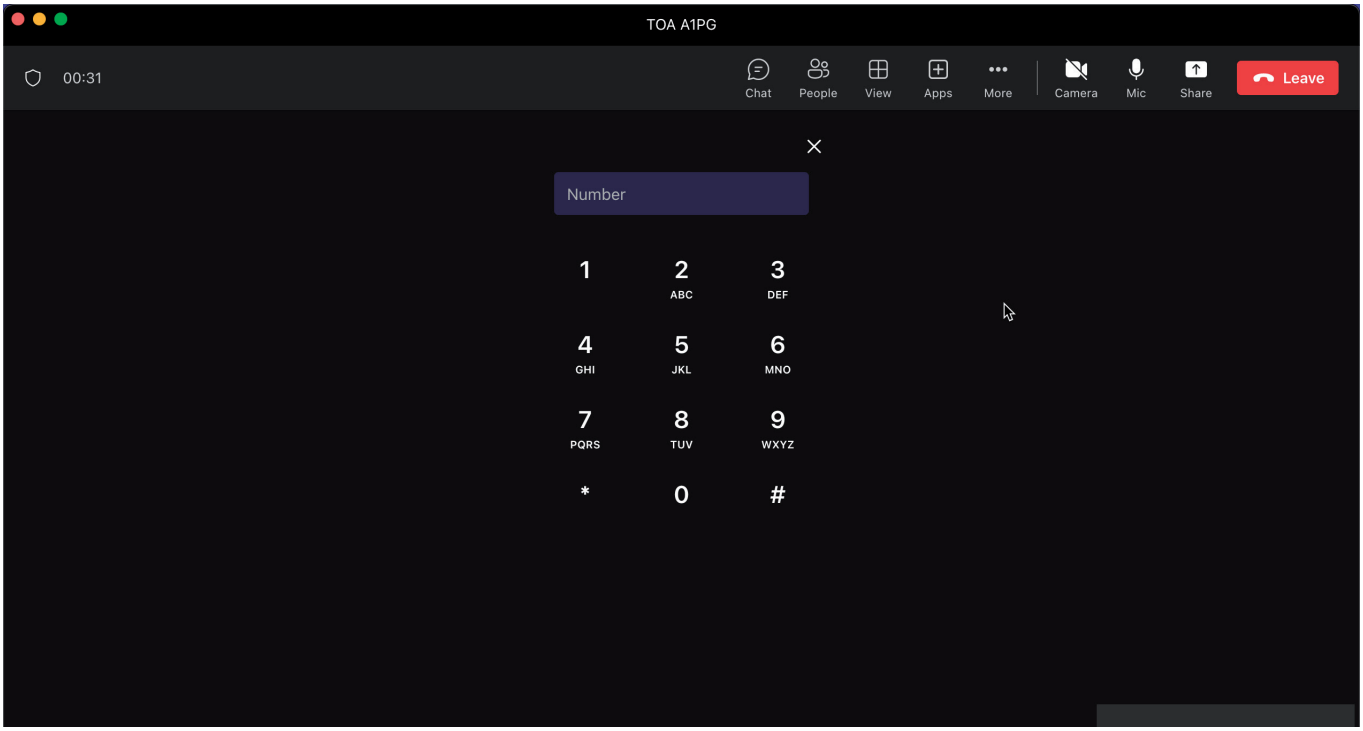
Configuration of the TOA IP Paging Gateway is now done.
When placing a call from Teams to the TOA IP Paging Gateway it will answer. After answering, open the ‘More actions’ menu on top of the calling screen.



Select the ‘Dial pad’.



The ‘Dial pad’ appears. Type the code of the desired TOA IP Paging device to be connected to that device.

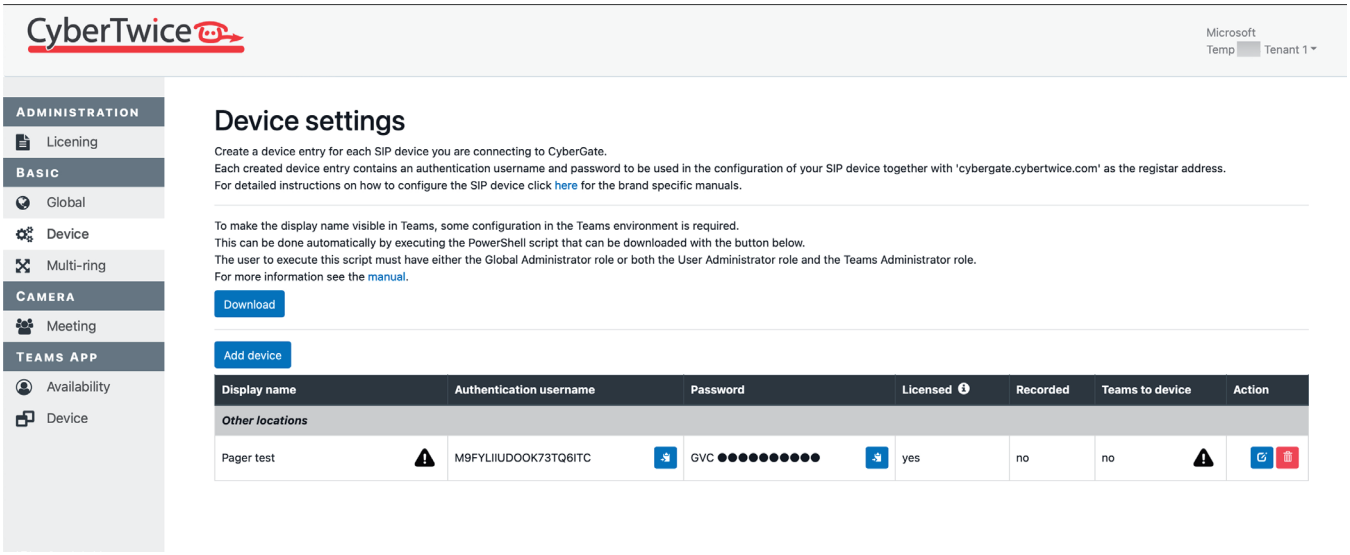


When connected to that device, the TOA IP Paging Gateway will play a confirmation sound through Microsoft Teams so you know that you’re connected and can start paging.

CyberGate Manangement Portal Configuration

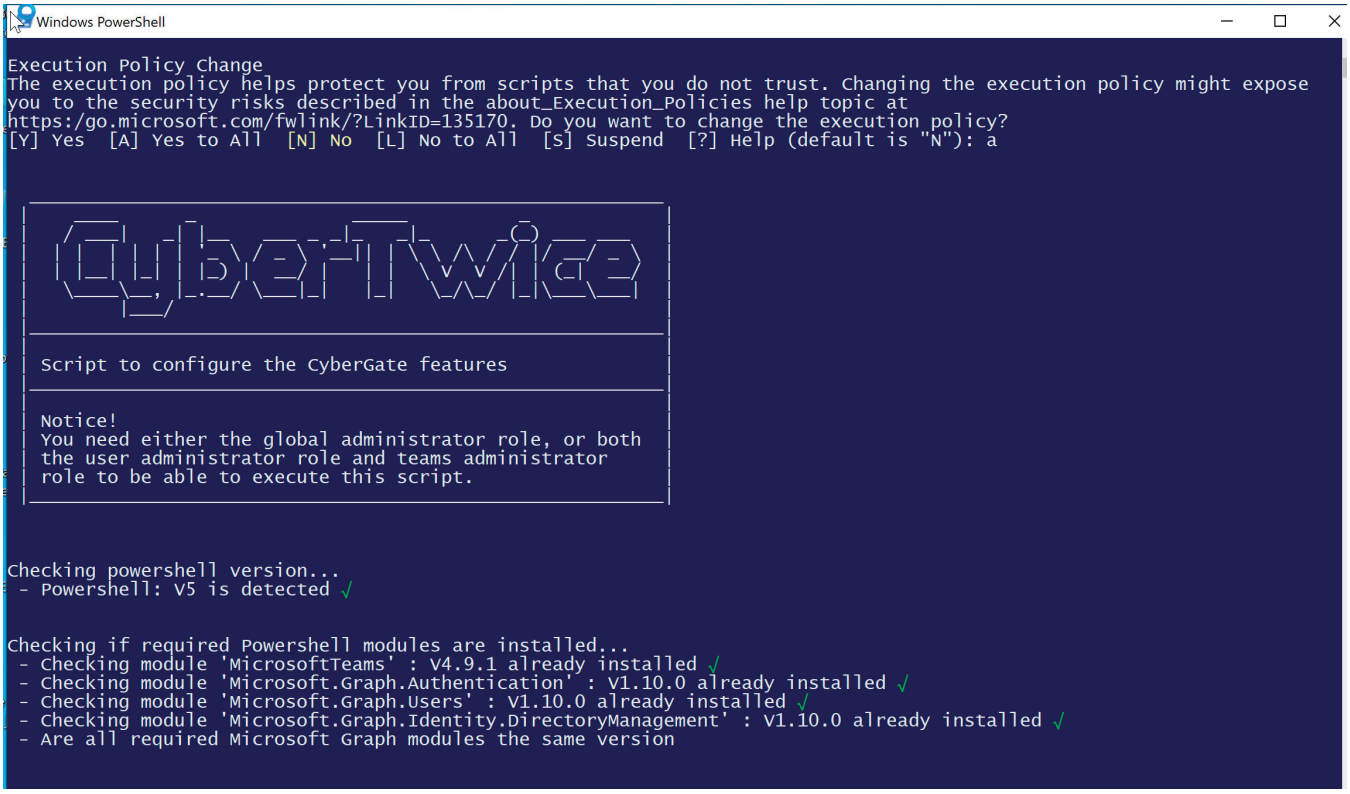
Navigate to the following URL: https://admin.cybergate.cybertwice.com

Log in to the admin portal using a Microsoft account with admin privileges and navigate to the Basic-Device menu.

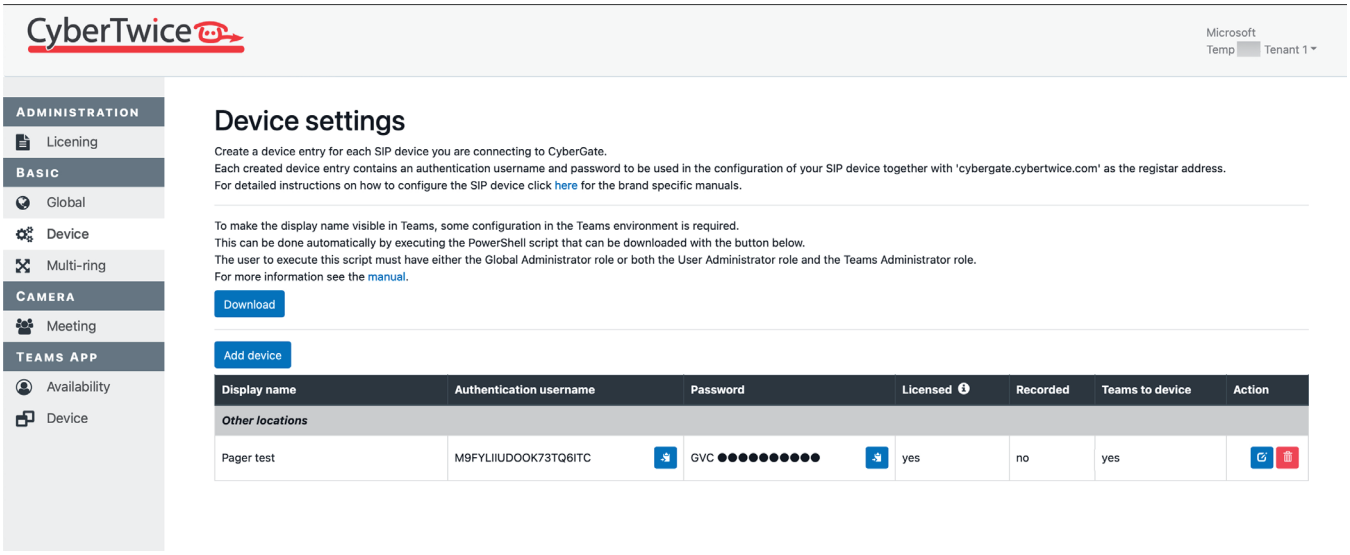


It displays the device that is used to configure the TOA. If the display name of the device shows the warning symbol, it is necessary to download and run the Feature configuration PowerShell script. If no warning sign is shown, skip this step.

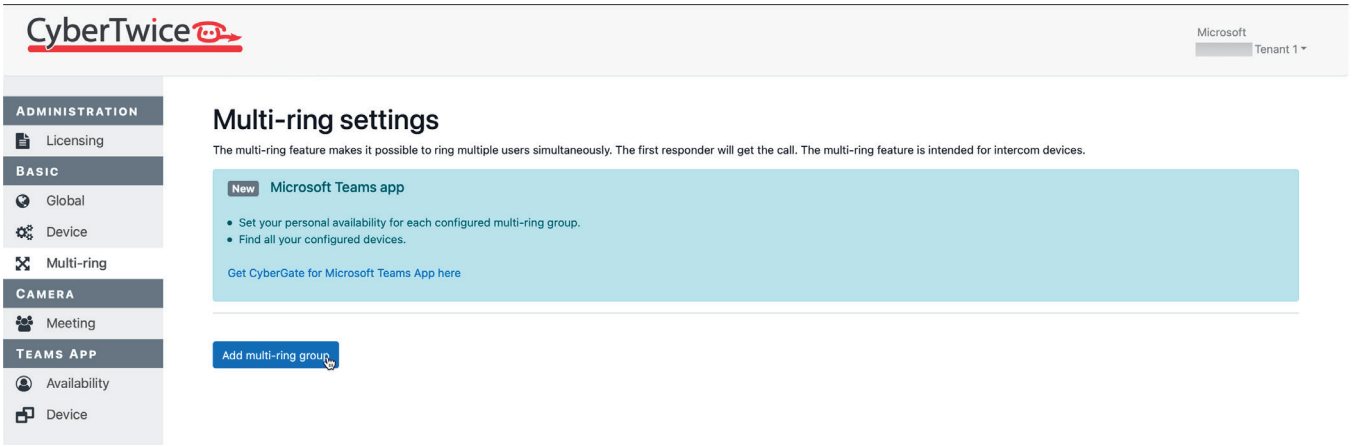
- Click on the blue 'Download' button to download the script
- Open PowerShell on your PC with administrator privileges
- Run the 'FeatureConfiguration.ps1' script (./ FeatureConfiguration.ps1)
- When it asks to authenticate, use the same Microsoft account as used to log in to the CyberGate Admin portal



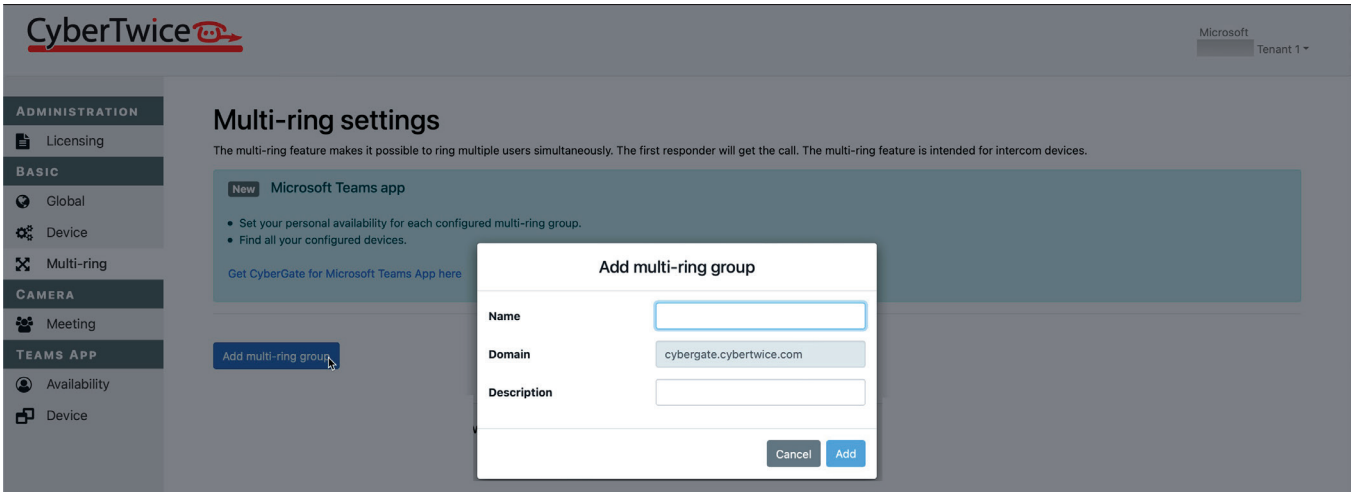
After the script is executed successfully the warning symbol is gone.



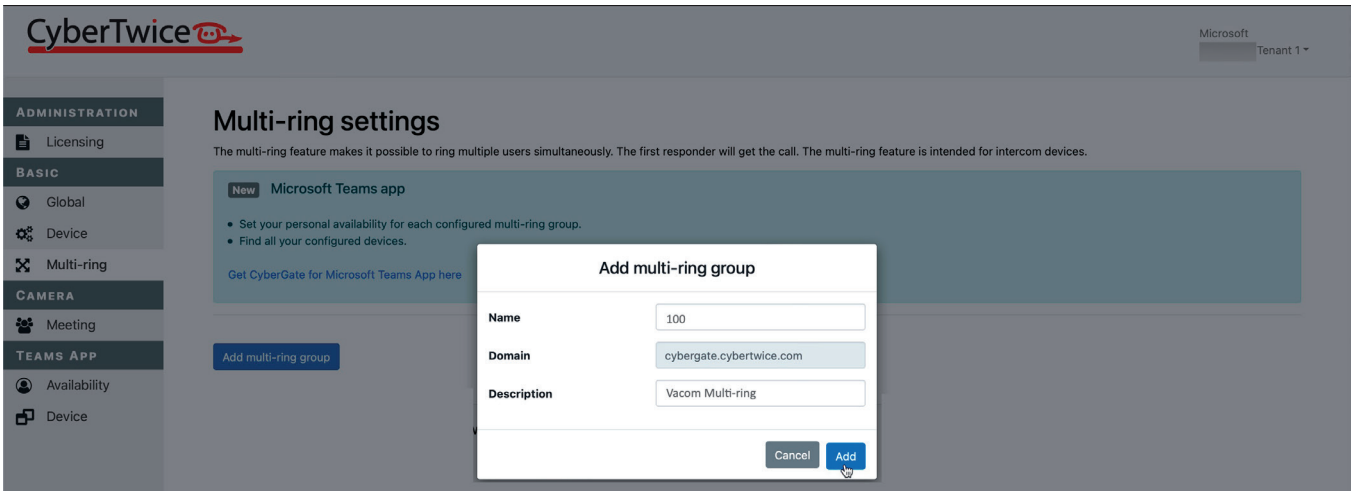
Next, navigate to the Basic-Multi-ring menu.

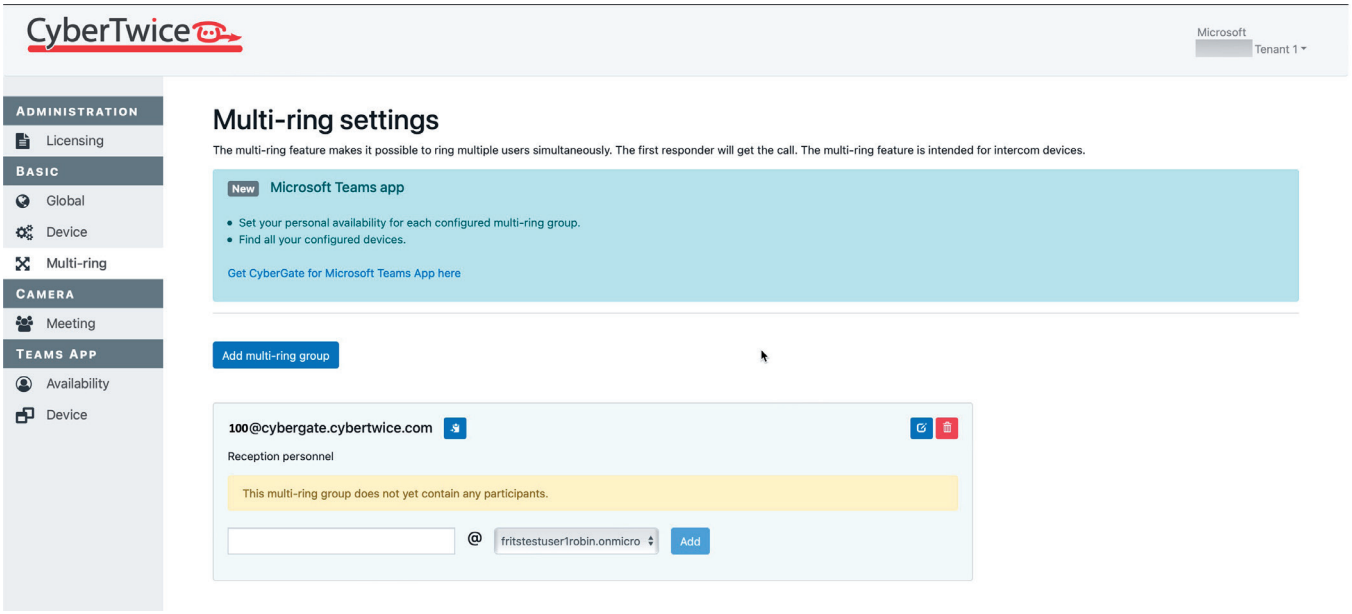


Click ‘Add multi-ring group’



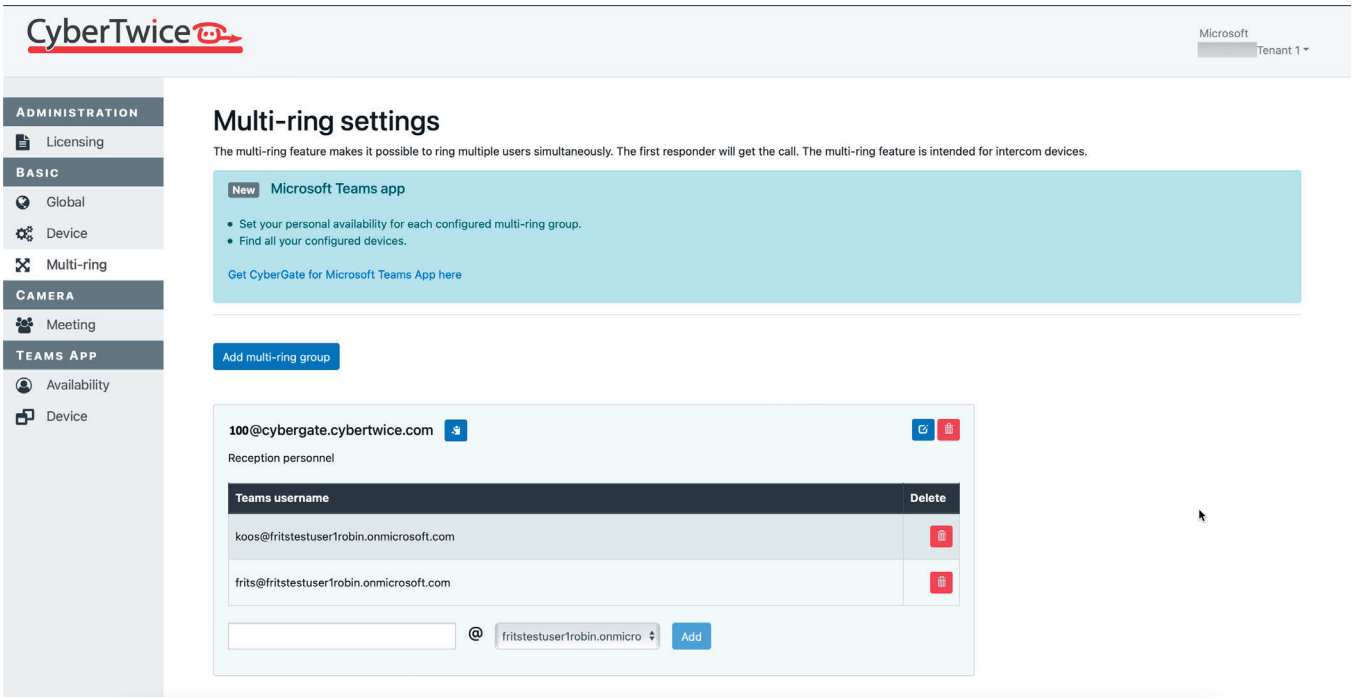
Name the Multi-ring group ‘100’ and add a description.
Click the blue ‘Add’ button to create the Multi-ring group.





The Multi-ring group is created, but does not contain Teams users to call.

Add a Teams user (only the name part, not the domain) and click ‘Add’
In this example, two users were added to the Multi-ring group.



Document History

Document Version	Date	Author	Change
1.0.0	27-02-23	KR	Initial version
1.0.1	10-05-23	KR	Text modifications