



TechNote: 2N and CyberGate

Version: 1.0.1 ENG
Date: 28-10-2024



**Configure the 2N IP Indoor View
for use with 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 2N IP devices to your Microsoft Teams environment. A 2N Indoor View can set up a call with audio to Microsoft Teams users and answer incoming calls from Teams using 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>).

2N IP Indoor View

For this document we used the 2N IP Indoor View (from now on named '2N') to connect to the CyberGate service (from now on named 'CyberGate').

Use cases:

- Call from 2N Indoor View through CyberGate to a Teams user or Multi-ring group
- Call from a Teams User through CyberGate to the 2N Indoor View

Important:

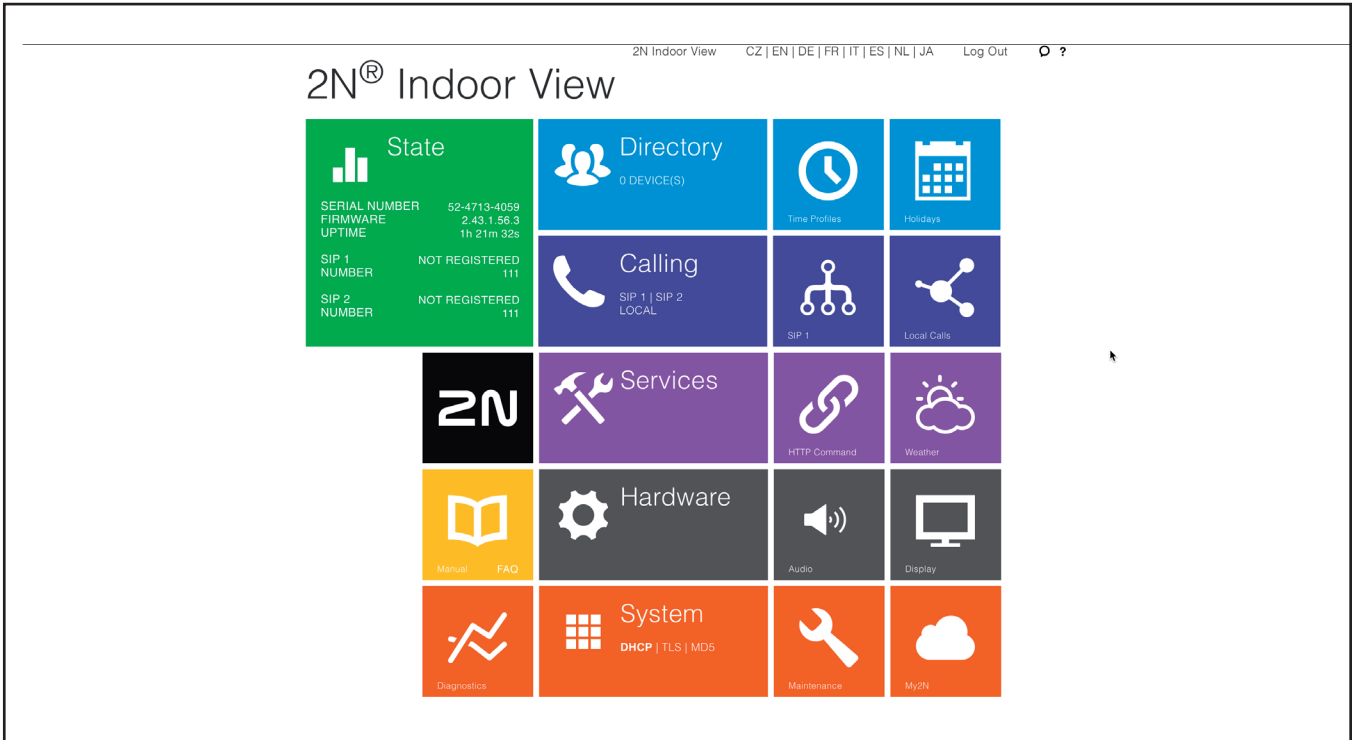
- Connection: as the 2N Indoor View is not equipped with a camera, the connection is two-way audio only
- Not supported: call from 2N IP (Video) Door Intercom through CyberGate to the 2N Indoor View, or vice versa.

The 2N IP Indoor View is able to setup a secure connection to CyberGate using SIP TLS and SRTP.

Follow the next steps to configure the 2N to connect it to CyberGate.

Connect to the 2N

Connect the 2N to the network, power it on and open a web browser to its IP-address. Sign in as 'admin' with the configured or supplied password of the 2N. After successful login the start screen will show.



Click on the Blue 'Calling' tile and open the SIP 1 settings.

The screenshot shows the 'Calling' configuration page for '2N Indoor View'. The left sidebar contains a 'Calling' menu with options for 'General Settings', 'SIP 1', 'SIP 2', and 'Local Calls'. The main content area is divided into three sections: 'Device Identity', 'Authentication', and 'SIP Proxy'. Each section contains input fields for various parameters.

Section	Parameter	Value
Device Identity	Display Name	2N Indoor View
	Phone Number (ID)	111
	Domain	192.168.1.1
	Test Call	[Button]
Authentication	Authentication ID	[Input Field]
	Password
SIP Proxy	Proxy Address	192.168.1.1
	Proxy Port	Default
	Backup Proxy Address	[Input Field]
	Backup Proxy Port	Default

Provide the following information:

Device Identity	
Display name	Use descriptive name for this account
Phone Number (ID)	Use the Username provided by the CyberGate Management Portal
Domain	cybergate.cybertwice.com
Authentication	
Authorization ID	Use the Username provided by the CyberGate Management Portal
Password	Use the Password provided by the CyberGate Management Portal
SIP Proxy	
Proxy Address	cybergate.cybertwice.com
SIP Registrar	
Registration Enabled	Enable
Registrar Address	cybergate.cybertwice.com
Advanced settings	
SIP Transport Protocol	Select TCP

Click 'Save' to register the 2N to CyberGate over TCP.



Calling



General Settings



SIP 1 >



SIP 2



Local Calls



Configuration **Video** Audio

SIP Account Enabled

Device Identity ▾

Display Name

Phone Number (ID)

Domain

Test Call

Authentication ▾

Authentication ID

Password

SIP Proxy ▾

Proxy Address

Proxy Port

Backup Proxy Address

Backup Proxy Port

SIP Registrar ▾

Registration Enabled

Registrar Address

Registrar Port

Backup Registrar Address

Backup Registrar Port

Registration Expiry [s]

Registration State **REGISTERED**

Failure Reason -

Advanced Settings ▾

SIP Transport Protocol

Lowest Allowed TLS Version

Verify Server Certificate

Client Certificate

Local SIP Port

PRACK Enabled

REFER Enabled

Send KeepAlive Packets

IP Address Filter Enabled

Receive Encrypted Calls Only (SRTP)

When a secure connection is required, modify the following fields:

Advanced settings	
SIP Transport Protocol	Select TLS
Lowest Allowed TLS Version	Select TLS 1.2
Receive Encrypted Calls Only (SRTP)	Enable
Encrypt Outgoing Calls (SRTP)	Enable

Click 'Save' to register the 2N to CyberGate over TLS.

Advanced Settings ▾

SIP Transport Protocol

Lowest Allowed TLS Version

Verify Server Certificate

Client Certificate

Local SIP Port

PRACK Enabled

REFER Enabled

Send KeepAlive Packets

IP Address Filter Enabled

Receive Encrypted Calls Only (SRTP)

Encrypted Outgoing Calls (SRTP)

Use MKI in SRTP Packets

Do Not Play Incoming Early Media

QoS DSCP Value

STUN Enabled


STUN Server Address

STUN Server Port

External IP Address

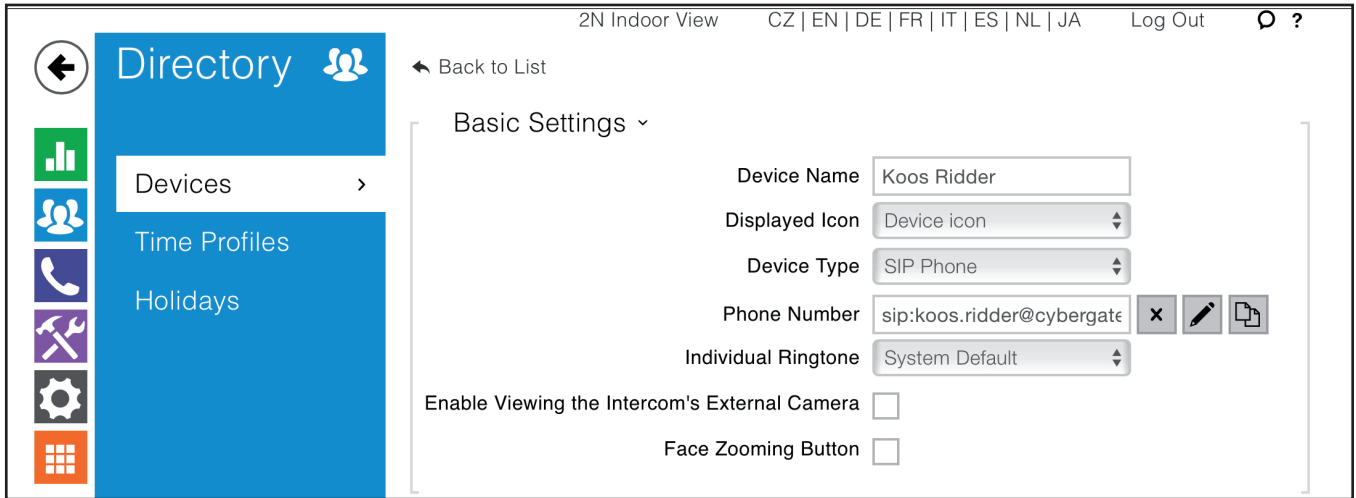
Compatibility With Broadsoft Devices

Rotate SRV Records

 Save

Navigate to the blue 'Directory' section, 'Devices'.

In this section you'll define one or more people to call.



Provide / change the following information:

Basic Settings	
Device Name	Descriptive name for this directory entry
Phone Number	Teams user to call in the format: <i>sip:first.last@cybergate.cybertwice.com</i> *

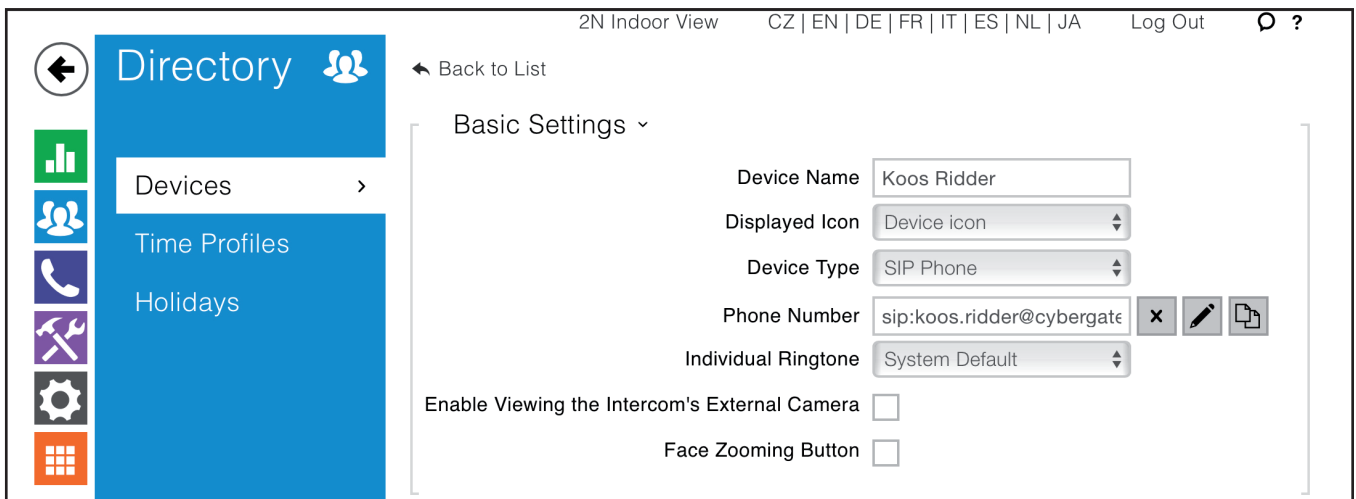
* For example, the user 'Koos Ridder', with the Teams name:

koos.ridder@mycompany.com

will translate to this destination address:

sip:koos.ridder@cybergate.cybertwice.com

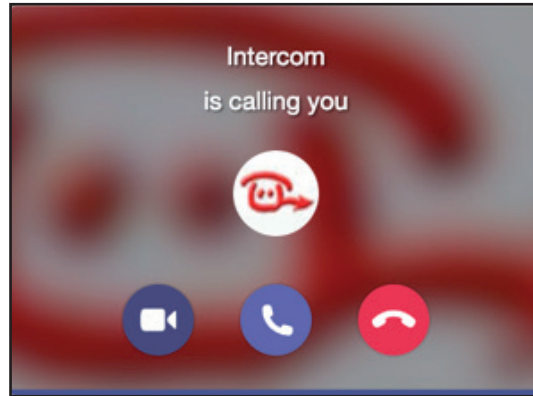
Click the 'Save' button to save.



Configuration of the 2N is done.

Press the call button on the display of the 2N to initiate a call to the configured Teams User.

If configured correctly, the Teams client will notify you of an incoming call. Answer it by clicking the phone horn.



The call will now be established.

Document History

Document Version	Date	Author	Change
1.0.0	21-05-24	KR	Initial version
1.0.1	28-10-24	KR	Updated layout