

How to reach a device behind the eWON Cosy 131 from a PC on the remote site



Initial situation:

You already have an existing remote access to your machine LAN (eWON LAN) using eWON Cosy 131 and our Talk2M solution.

Request:

On the remote site, a PC (device A on the picture) needs to connect to one of your machines (device B on the picture).

Solution:

Keep in mind that on the local PC, you can simply use eCatcher or M2Web to connect to the machine LAN. Like this you benefit of the firewall and logging features (connection reports, etc.) of Talk2M.

However, if the local PC needs a direct access to the device on the Machine LAN, then you can activate inside the eWON the NAT 1:1 feature.

This feature will create a supplementary IP address on the Site LAN on which the machine will become accessible.



1. How to enable NAT 1:1 on eWON Cosy

The NAT 1:1 feature exists on the eWON Cosy 131 since firmware version 10.0.

If needed you can update your Cosy device using the eBuddy companion tool. For more details about firmware upgrade, refer to our <u>Support website</u>.

1.1. Launch the Gateway wizard

Settings > Gateway

The first page of the Gateway wizard allows you to enable or disable the USB gateway. The second wizard page will allow you to configure the NAT 1:1 feature:

1) Enable the NAT 1:1 option

NAT 1	:1 configuration	o vou to roman and IP	on one network is		í
anoti	her IP on another net	work interface	UN UNE NELWURK II	nenace to	
Exan	nple: remap 10.0.101	.208 on LAN to 192.16	68.59.201 on WAN		
🕑 Er	abled				
Orig	in:	LAN			
Мар	ping:	NAT 1:1 on WAN 🔻			
	Device IP (LAN)	Mapped IP (VVAN)	Nickname	Clear	
Route	1 192.168.0.115	10.0.101.11	My PLC 1	Clear	
Route	2 0.0.0.0	0.0.0.0		Clear	

2) Choose the mapping option "NAT 1:1 on WAN" and encode a new entry inside the mapping table.

In our example: the Ethernet device on eWON LAN side with IP address 192.168.0.115, will become reachable on the eWON WAN side using IP address: 10.0.101.11

3) Click Save to finish the NAT 1:1 configuration.

- Warning -

Check with your IT manager which IP addresses are available and can be used (and reserved!) for the NAT 1:1 feature of the eWON. As these IP addresses are not assigned by the DHCP server, it might come in conflict with other (future) devices on site's LAN.



1.2. Adapt the network security settings of the eWON

To allow the Nat 1:1 feature on the eWON, its security settings must be adapted.

We need to allow access to the eWON's WAN side, which by default is blocked on an eWON configured for a Talk2M connection.

To adapt the network security settings on the Cosy proceed as follows:

- 0.0 MA Status Settings System Internet Talk2M Maintenance Gate Im **Global Configuration** Language: English 🔻 Reboot eWON: Restart the system. Reboot Show advanced options Show more configuration options (It could be more confusing) Edit COM configuration Advanced configuration edition Use at your own risk. Advanced configuration edition Use at your own risk. Show debug mode Show debug informations about the modem communication in realtime logs LAN Configuration I AN IP Address 192.168.120.66 LAN Subnet Mask: 255.255.255.0
- 1) Open the Maintenance menu

2) Select the "show advanced options" and click on the "Edit COM configuration" link

3) Use the search button on top of the maintenance window to search following parameters and to set its value:

- FwrdToWAN : 1	(1 = WAN IP forwarding allowed)
- WANItfProt : 2	(2 = Wan protection level : Allow all)

4) Reboot the eWON Cosy.

A reboot button is available on the Maintenance web page.



Knowledge Base

KB-0001-00 / Rev. 1.0

2. Detailed connection example



The Talk2M user can access the PLC using the eCatcher or M2Web connection.

From the PC on the remote site LAN (device A on our example), the PLC (device B in our example) can be accessed using IP address 10.0.101.11. Because we configured the NAT 1:1 table to map these addresses:

The NAT another I	1:1 feature allows P on another netwo	you to remap one IP ork interface	on one network infe	erface to
Example	remap 10.0.101.2	08 on LAN to 192.16	8.59.201 on WAN	
Enable	d			
Origin:	L	AN		
Mapping	: [NAT 1:1 on WAN 🔻		
	Device IP (LAN)	Mapped IP (WAN)	Nickname	Clear
Route 1	192.168.0.11	10.0.101.11	PLC 1	Clear
Douto 2		0000		Class

Revision

Revision History

Revision Level	Date	Description
1.0	04/09/2015	Original Document

Document build number: 17

Note concerning the warranty and the rights of ownership:

The information contained in this document is subject to modification without notice. Check http://wiki.ewon.biz for the latest documents releases.

The vendor and the authors of this manual are not liable for the errors it may contain, nor for their eventual consequences.

No liability or warranty, explicit or implicit, is made concerning the quality, the accuracy and the correctness of the information contained in this document. In no case the manufacturer's responsibility could be called for direct, indirect, accidental or other damage occurring from any defect of the product of errors coming from this document.

The product names are mentioned in this manual for information purposes only. The trade marks and the product names or marks contained in this document are the property of their respective owners.

This document contains materials protected by the International Copyright Laws. All reproduction rights are reserved. No part of this handbook can be reproduced, transmitted or copied in any way without written consent from the manufacturer and/or the authors of this handbook.

eWON sa, Member of ACT'L Group