eWON Application User Guide AUG 039 / Rev 1.2



Access Allen-Bradley PLCs through an existing Talk2M connection



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This short guide explains how to access an Allen-Bradley® PLC remotely through Talk2M and a pre-configured eWON. Applications include remote servicing of PLC-controlled equipment.



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1. Objective

The objective of this document is to access remotely an Allen-Bradley® PLC assuming that configuration tasks have been done (*).

Accessing an existing setup remotely implies the following steps :

- 1. Opening the VPN tunnel
- 2. Mapping the PLC with your Rockwell Automation® software
- 3. Accessing your PLC through the Internet

(*) as per AUG-035-0-EN (Remote Access for Allen Bradley PLCs) http://wiki.ewon.biz/@api/deki/files/893/=AUG-035-0-EN-(Remote_Access_for_Allen_Bradley_PLCs).pdf

2. Hardware and software requirements

2.1 Hardware requirements

In order to follow this guide you'll need:

- PC suitable to connect to the Internet
- Internet connection
- Configured remote setup including eWON and Allen Bradley PLC.

2.2 Software requirements

- eCatcher VPN tunneling utility <u>http://support.ewon.biz/softwares.htm</u>
- Talk2M have a valid user account at disposal
- Rslinx Communication utility
- RSLogix500 if you intend to connect to a PLC of the SLC500 Series
- RSLogix5000 if you intend to connect to a PLC of the Logix Series

3. Network diagram



- 1. From a computer running your PLC programming software you will interact with a PLC in the field just as if you were using a point-to-point connection
- 2. Using the local gateway to Internet and the eCatcher software, you will "see" the eWON as part of your local network
- 3. You will create your VPN tunnel on the Internet using your Talk2M account
- 4. This will allow you to seamlessly pass the remote firewall and safely reach the eWON using the local LAN
- 5. The eWON will allow you to access the PLC transparently, indifferently whether it is hooked using the serial or the Ethernet link
- 6. You take control over the remote PLC

4. Opening the VPN tunnel

- 1. Make sure you have installed the eCatcher application from <u>http://support.ewon.biz/softwares.htm</u>.
- 2. Start your eCatcher application, login using the credentials of the Talk2M account in which the eWON was created:

🙇 eCatch	er (3.0.2 build 7394)		
O Devices			
Users	Login		
Account	Username : Password :	pbt Forgot password	Use the credentials of the Talk2M
Settings	Account :	ewon_sales Create a Free+ account	account in which the eWON was created
	Connect	er me Automatically	
		Login	
i _{Help}			
Exit			
	🔀 my.talk2m.com	Credit : Idle	[] 🕡 Talk2M

3. The application shows the eWON available for tunneling (*). At this point you only "see" the ones available on your account but you do not yet have the VPN connection required to access the PLC.

(*) Only eWON that are "online" (green icon) are "ready" for tunneling. An eWON with no icon or with red icon is not online. It can be either a GPRS/EDGE device that first needs to be waked up or a device that is simply not available for the moment.

4. Make sure your eWON is "online", select it and click *Connect* to create the VPN tunnel:

🛋 eCatcher	(3.0.0 build 7195)						
e	Active Connection						
Devices	<u>\$</u>						
*	Name	IP	Des	cription	Us	er(s) connected	Pool
Users		No VPN connected		🚨 Vpn	Connection		× (
Æ	eWON list	eWON yet		- 	VPN Tunnel	: Establishing Vpn	Tunnel
Pool	🗄 🔊 🔍 🖩 💉	Connect 💽			5		
	▼ ▼		~	*	¥	×	✓
Account	Actio Name 📌 Sta	tus Description	lse	er(s) connect	Pool	PLC type	emote access m
*	nline 🔊 Rockwell	eWON + CompactLogix + IP	camera		eV	VON "seen" b Talk2M	y
Settings	and a second sec	سوسور فنبو	·		pro stra		

...wait a couple of seconds for Talk2M to create the route. As soon as the route is created, the connected eWON appears in the upper part of the window:

4. Opening the VPN tunnel

🔔 eCatch	er (3.0.0 build 7195)	
e Devices	Active Connection	
Users	Name IP Description User(s) connected Popl Rockwell 10.8.128.22:81 eWON + CompactLogix + IP camera + unknown user Demo	
Pool	eWON list	1
Account	Rockwel	7
×	🔏 Rockwell Connected eWON + CompactLogix + IP camera unknown user Demo AB CompactLog LAN 1	9.

5. You are now connected to the eWON through the VPN tunnel.

5. PLC software mapping configuration

The objective of this step is to configure the PLC communication driver to use the remote connection instead of (or in addition to) the local connection.

- Tips -

As of firmware v12, there is a PLC Discovery feature inside the eWON. This allows the automatic discovery of PLC (linked to the eWON) on the network while you are connected through Talk2M. No need to set the IP of the PLC in the same range than the IP of the eWON.

For more information, please refer to AUG-070: PLC Discovery through Talk2M

If firmware version is lower than 12, please follow the procedure hereunder.

- 1. Start the RSLinx application
- 2. Select the Communications, Configure Drivers menu options



3. Select or add the AB_ETH-1 (Ethernet Devices) driver and click the Configure button



- 4. Add the IP address on which the PLC can be reached in the *Station Mapping* table. This will differ depending on the connection used between the PLC and the eWON.
 - Serial Link: Enter the LAN IP address of the eWON.
 - Ethernet Link: Enter the IP address of the PLC.
- 5. In RSLinx, Select the *Communications*, *RSWho* menu options to check whether your new PLC is appearing.



6. Your PLC software driver is now mapped to the PLC.

6. Accessing your PLC through RSLogix

- 1. Start your RSLogix software and select:
 - Who Active Go Online (RSLogix500), or
 - Who Active (RSLogix5000)

🏦 RSLogi	x 500		
File View	Comms Tools	Window He	elp
🗋 🖆 🖡	System Com	ms	🗠 S:0/0 🚽
	Who Active	Go Online n	
OFFLINE	Go Online	dm	1 28 1 1 1
No Edits	Upload		
Driver AB	ETH.1		Node : 2d

- 2. In the tree select the IP address and click on the
 - OK button (RSLogix500)
 - Go Online button (RSLogix5000)





- 3. Allow enough time for the connection to actually take place, especially when using a modem connection since the throughput may be relatively slow.
- 4. As soon as the connection is working, it appears in the status bar of RSLogix.

6. Accessing your PLC through RSLogix

RSLogix 500 - MONTESTAMOLRSS
Edit View Search Comms Tools Window Help
D 🖆 🖬 🗇 🕺 🛍 🖻 🗠 🐃 S:0/0 💽 🖌 🖓 🖓 🖓 🔍 Q, 🗖 🛛 🕂 🕫
REMOTE PROG ± No Forces No Edits Forces Disabled Driver: AB_ETH-1 Node : 2d
🔞 RSLogix 5000 - feb_9 in apr_21.ACD [1756-L55]
File Edit View Search Logic Communications Tools Window Help
Rem Run 🚺 🗖 Run Mode 🛛 🙀 Path: AB_ETH-1\192.168.120.172\Backplane\0* 🗸 🛣
No Forces Controller OK No Edits Battery Fault 1/0 OK

- 5. You can now work in remote programming mode.
- 6. Once you finished your work with RSLogix:
 - Go Offline and close RSLogix.
 - Close the Talk2M connection (VPN tunnel) by clicking *Disconnect* in eCatcher.

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	eWON list						1
Pool	+ & 4 🖩	Disco	nnect 💽				4
垦	Rockwel V			V	~	×	
Account	Actio Name	💉 Status	Description	lser(s) connect	Pool	PLC type	emote access
	🔏 Rockwell	Connected	eWON + CompactLogix + IP camera	unknown user i	Demo	AB CompactLog	LAN
	to a succession and a summer of	and the	Company and the second se	Anne and		and have	Amer 1

Note: If the eWON is connected to the Internet using a GPRS/Edge modem, you may want to disconnect it to save connection costs. To close the line, you have to use the **Go offline** button which is displayed on the context menu when you right-click the eWON in the eWON list.



7. End of Accessing your PLC through RSLogix

Revision Level	Date	Description
1.0	30/06/11	First issue
1.1	20/07/11	Add login eCatcher
1.2	15/12/16	Added "PLC Discovery" to Chapter 5

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