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UNIGATE[®] Scan Tool



Deuschmann Automation GmbH & Co. KG
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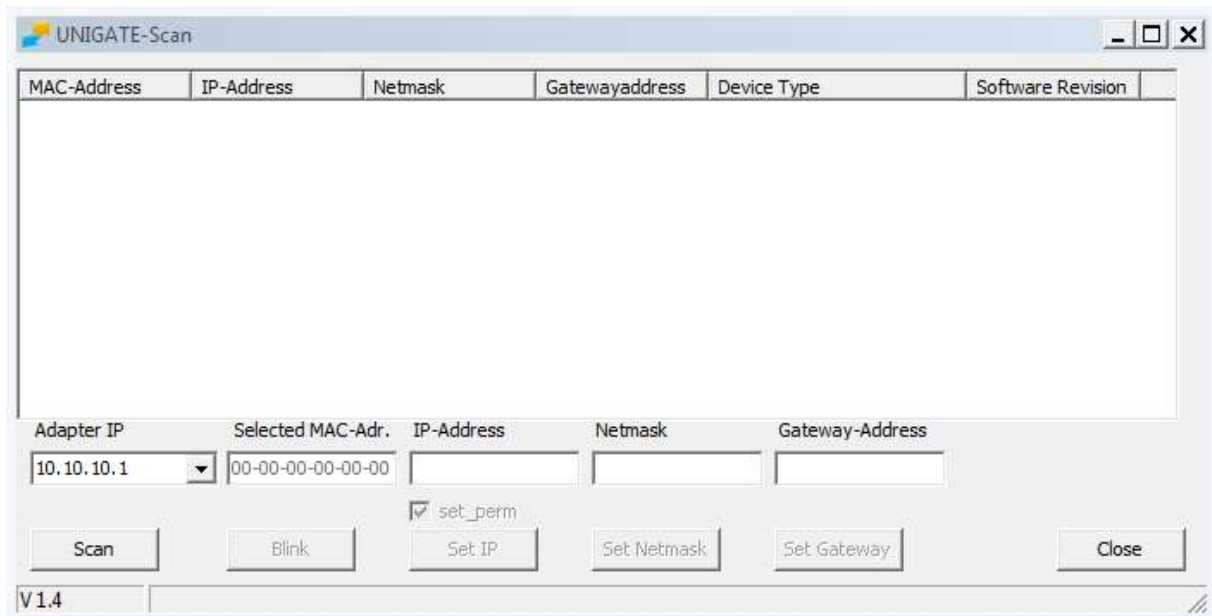
1 Introduction

The UNIGATE® Scan Tool can find and display UNIGATE® Fast-Ethernet devices. The availability of the various functionalities depends on the firmware version of the respective UNIGATE®.

Please make sure to always work with the current version of the UNIGATE® Scan Tool. The current version is available on www.deutschmann.de in the download area.

2 Installation

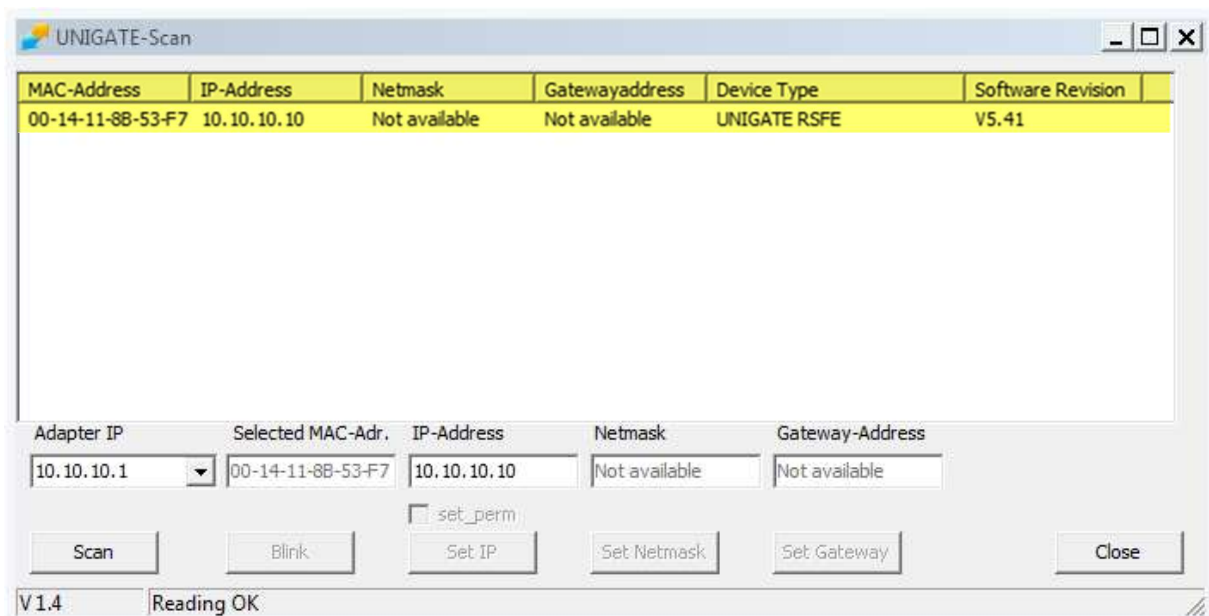
1. Install and start UNIGATE® Scan Tool. First, open the zip file „**SetupUNIGATESCAN... .zip**“ and run the file „**SetupUNIGATESCAN... .exe**“. Afterwards the scan function can be started. See chapter 4 „Scan function“.



3 UNIGATE® Scan Tool - Overview

Table

- **MAC-Address:** Displays the MAC address of the UNIGATE devices found in the network. This example displays the IP address range „xx.xx.xx.xx.xx“.
- **IP-Address:** Displays the IP address of the UNIGATE devices in the network. This example displays the IP address range „10.10.10.10“.
- **Netmask:** Displays the netmask of the UNIGATE devices found in the network. This example displays the IP address range „Not available“.
- **Gateway address:** Displays the Gateways address of the UNIGATE devices found in the network. This example displays the IP range „Not available“.
- **Device Type:** Displays the device type of the UNIGATE devices found in the network. This example displays the IP address range „UNIGATE RSFE“.
- **Software Revision:** Displays the version number of the firmware of the UNIGATE devices found in the network. This example displays the IP address range „V5.41“.



Input masks

- **Adapter IP:** All IP address ranges, the Ethernet adapter available on the computer, are displayed here. This example displays the IP address range „10.10.10.1“.

- **Selected MAC-adr.:** The MAC address of the selected UNIGATE is displayed in the table here. In this example „00-14-11-88-53-F7“.
- **IP address:** Here you have to enter the IP address that should be assigned. This example says „10.10.10.10“.
- **Netmask:** Enter the netmask to be assigned here. This example states „Not available“.
- **Gateway-Address:** Here the gateway address of the router must be entered if the UNIGATE is to be connected to the Internet. This example states „Not available“.

MAC-Address	IP-Address	Netmask	Gatewayaddress	Device Type	Software Revision
00-14-11-88-53-F7	10.10.10.10	Not available	Not available	UNIGATE RSFE	V5.41

Adapter IP	Selected MAC-Adr.	IP-Address	Netmask	Gateway-Address
10.10.10.1	00-14-11-88-53-F7	10.10.10.10	Not available	Not available

☐ set_perm

Scan Blink Set IP Set Netmask Set Gateway Close

V1.4 Reading OK

Buttons

- **Scan:** Scans all UNIGATES in the selected network.
- **Blink:** Flashing test to locate the UNIGATE.
- **Set IP:** Set the IP address.
- **set_perm:** If the checkmark is set, the IP address is permanently set in the EEROM of the UNIGATE. Otherwise, the IP address is set only temporarily, which means that the IP address is no longer present in the UNIGATE after switching it off and on again.
- **Set Netmask:** Set the Netmask.

- **Set Gateway:** Set the gateway address.
- **Close:** Close the program.

MAC-Address	IP-Address	Netmask	Gatewayaddress	Device Type	Software Revision
00-14-11-8B-53-F7	10.10.10.10	Not available	Not available	UNIGATE RSFE	V5.41

Adapter IP: 10.10.10.1 | Selected MAC-Adr.: 00-14-11-8B-53-F7 | IP-Address: 10.10.10.10 | Netmask: Not available | Gateway-Address: Not available

☐ set_perm

Buttons: Scan, Blink, Set IP, Set Netmask, Set Gateway, Close

Status bar: V 1.4 | Reading OK

Status bar

- **Status field 1:** Information on the release state. Here „V1.4“.
- **Status field 2:** Information on the current state. Here „Reading OK“.

MAC-Address	IP-Address	Netmask	Gatewayaddress	Device Type	Software Revision
00-14-11-8B-53-F7	10.10.10.10	Not available	Not available	UNIGATE RSFE	V5.41

Adapter IP: 10.10.10.1 | Selected MAC-Adr.: 00-14-11-8B-53-F7 | IP-Address: 10.10.10.10 | Netmask: Not available | Gateway-Address: Not available

☐ set_perm

Buttons: Scan, Blink, Set IP, Set Netmask, Set Gateway, Close

Status bar: V 1.4 | Reading OK

3 Connecting the UNIGATE® via Ethernet interface

Pay attention to the following pin assignment when wiring the UNIGATE and the Ethernet port on the PC or Switch/Hub

3.1 UNIGATE® CL

UNIGATE® CL
X3 Pin 1 = TD+ (RD+*)
X3 Pin 2 = TD- (RD-*)
X3 Pin 3 = RD+ (TD+*)
X3 Pin 6 = RD- (TD-*)
*) device supports "autocrossover"

3.2 UNIGATE® EL

UNIGATE® EL
X5 Pin 1 = TD+ (RD+*)
X5 Pin 2 = TD- (RD-*)
X5 Pin 3 = RD+ (TD+*)
X5 Pin 6 = RD- (TD-*)
*) device supports "autocrossover"

3.3 UNIGATE® MB

UNIGATE® MB
X3 Pin 1 = TD+ (RD+*)
X3 Pin 2 = TD- (RD-*)
X3 Pin 3 = RD+ (TD+*)
X3 Pin 6 = RD- (TD-*)
*) device supports "autocrossover"

3.4 UNIGATE® IC

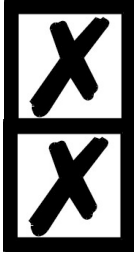
UNIGATE® IC
Pin 16 -> (RJ45) Pin 1 = TD+
Pin 15 -> (RJ45) Pin 2 = TD-
Pin 14 -> (RJ45) Pin 3 = RD+
Pin 13 -> (RJ45) Pin 6 = RD-

3.5 UNIGATE CX (with Fast Ethernet or Modbus TCP)

UNIGATE® CL
X3 Pin 1 = TD+ (RD+*)
X3 Pin 2 = TD- (RD-*)
X3 Pin 3 = RD+ (TD+*)
X3 Pin 6 = RD- (TD-*)
*) device supports "autocrossover"

4 Scan-Function

1. The UNIGATE has to be connected via Ethernet and started in configuration or data transfer mode.



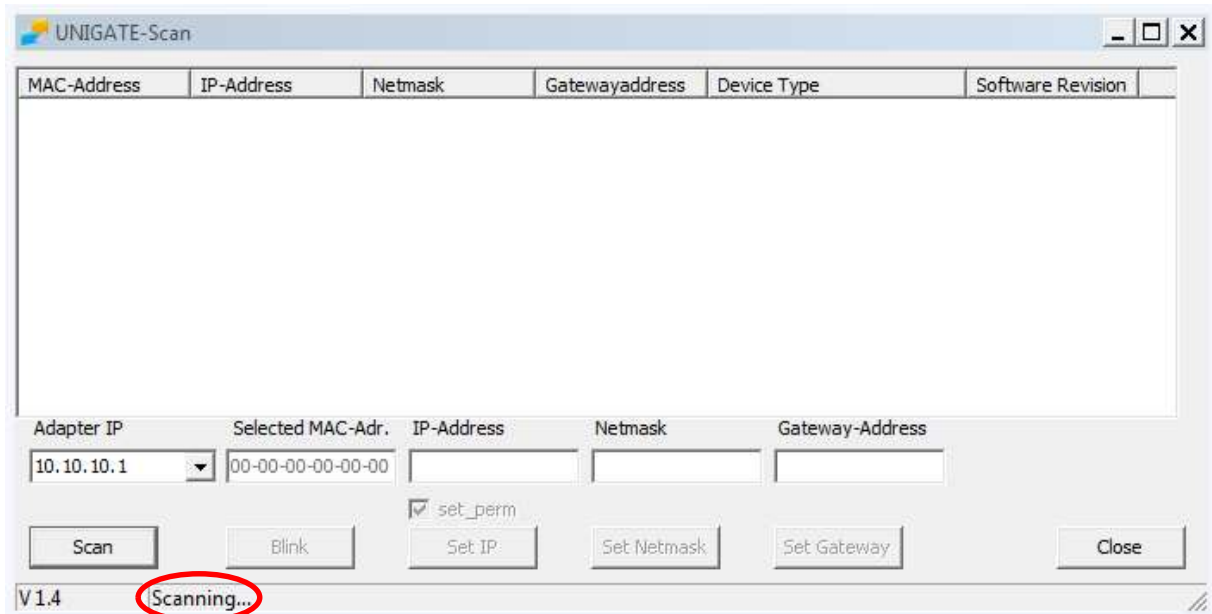
When using a „custom script“ one of the 4 communication channels has to be free in order for the UNIGATE® Scan Tool to be used.

The availability of various functionalities is dependant on the firmware of the respective UNIGATE®.

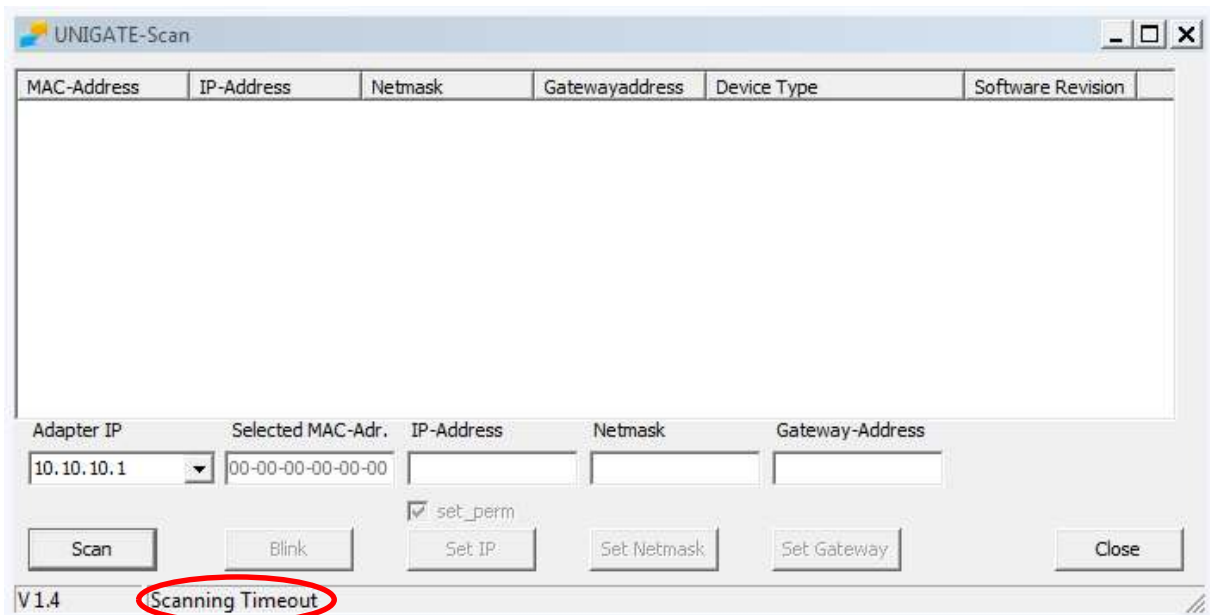
2. The selection box under „Adapter IP“ displays all IP address ranges of the Ethernet adapter present on the PC. For scan mode, the desired IP address range must be selected.

3. The search is started via „Scan“ button.

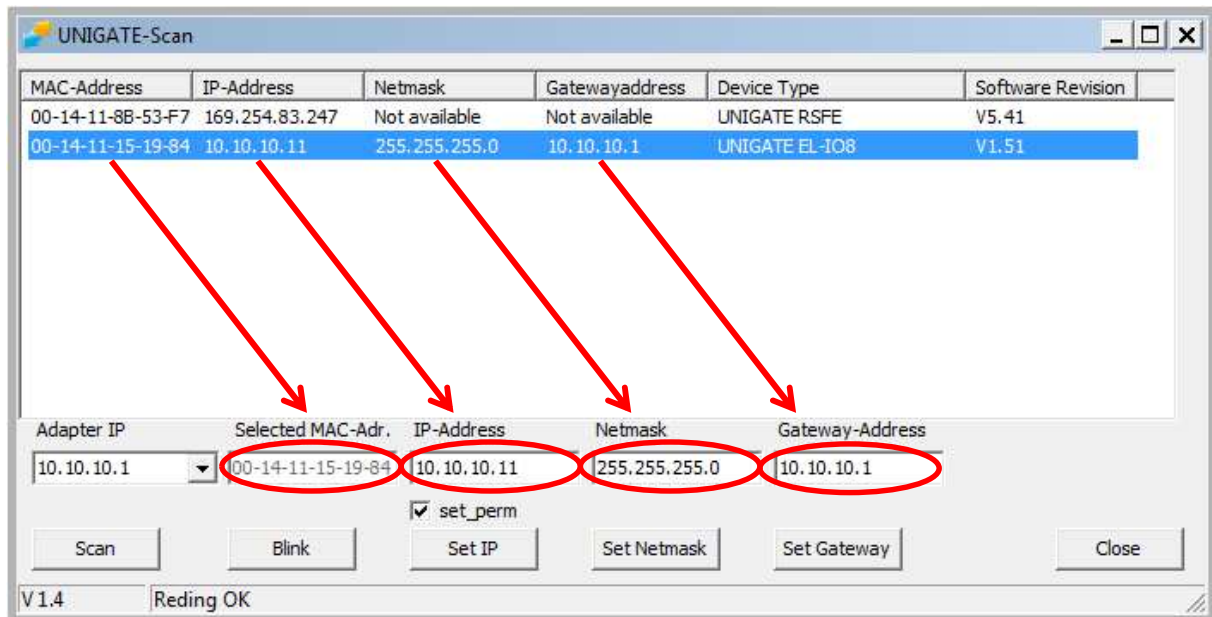
- 3.1 The message „Scanning“ appears in the status bar. All UNIGATE® Fast Ethernet devices that are in the previously selected IP address range are now displayed with MAC address, IP address, type designation and software revision. The status bar also displays the message "Reading OK".



- 3.2 If the scan fails, the message "Scanning Timeout" appears in the status bar. Then the previously selected "Adapter IP" must be checked as well as the wiring of the UNIGATES.

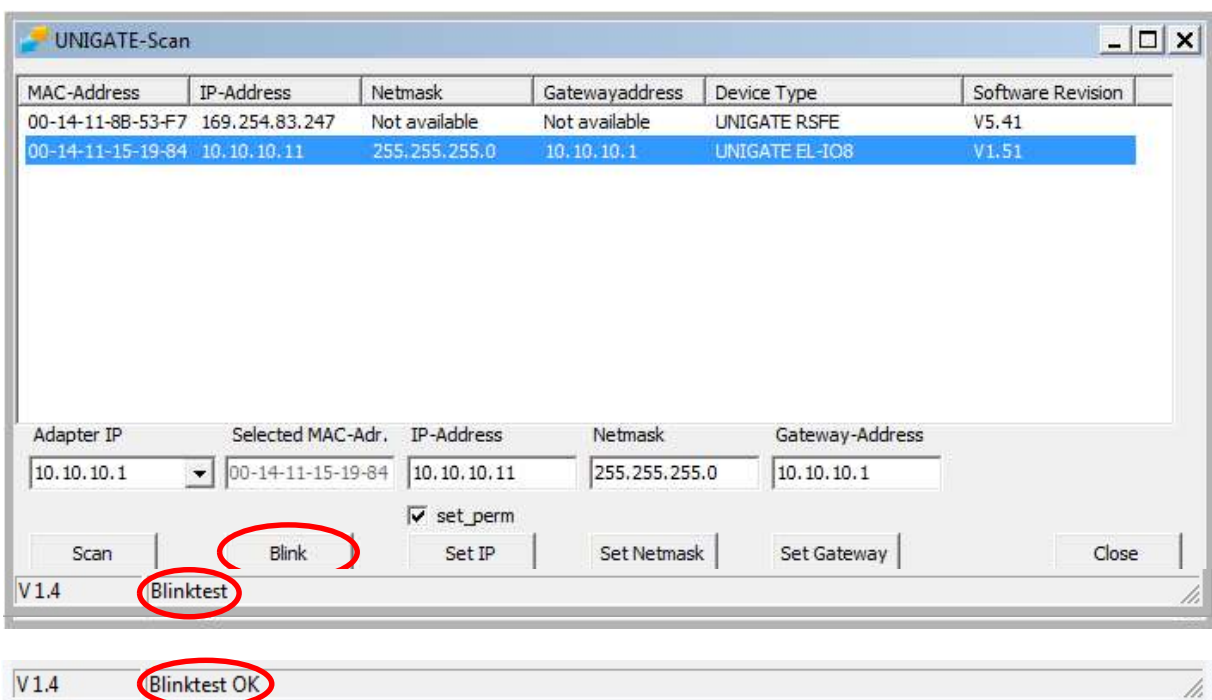


4. Subsequently, a UNIGATE® Fast-Ethernet device can be marked. All the parameters of this UNIGATE are then displayed in the input mask.



Attention: Depending on the firmware version of the respective UNIGATE, it may happen that not all parameters that can be set via the input mask are available.

5. Afterwards, a flashing test can be performed on the marked UNIGATE via the "Blink" button to check whether the desired UNIGATE has been selected. The status bar shows the message "Blinking test". Depending on the UNIGATE, the bus state LED will flash red for approx. 5 seconds. Then the message "Flashing test OK" appears in the status bar.

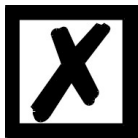


6. The parameters "IP-Address"; "Netmask" and "Gateway-Address" can now be set as follows.



Before changing any parameter, the corresponding UNIGATE must be selected / marked.

7.1 IP-Adresse: The desired IP address can now be entered in the input mask and assigned to the UNIGATE® via the "Set IP" button. The message "Setting IP" appears in the status bar, followed by the message "Setting OK".



On delivery, the IP address of the UNIGATE® is "**0.0.0.0**". In this case, the firmware of the UNIGATE® automatically assigns an address which is valid in all networks (link local address **169.254.x.x**).



If the checkbox is set to "set_perm", the IP address is permanently stored in the EEROM of the UNIGATE®. Otherwise the IP address will only be saved temporarily.

MAC-Address	IP-Address	Netmask	Gatewayaddress	Device Type	Software Revision
00-14-11-15-19-84	10.10.10.11	255.255.255.0	10.10.10.1	UNIGATE EL-IO8	V1.51
00-14-11-8B-53-F7	169.254.83.247	Not available	Not available	UNIGATE RSFE	V5.41

Adapter IP	Selected MAC-Adr.	IP-Address	Netmask	Gateway-Address
10.10.10.1	00-14-11-15-19-84	10.10.10.2	255.255.255.0	10.10.10.1

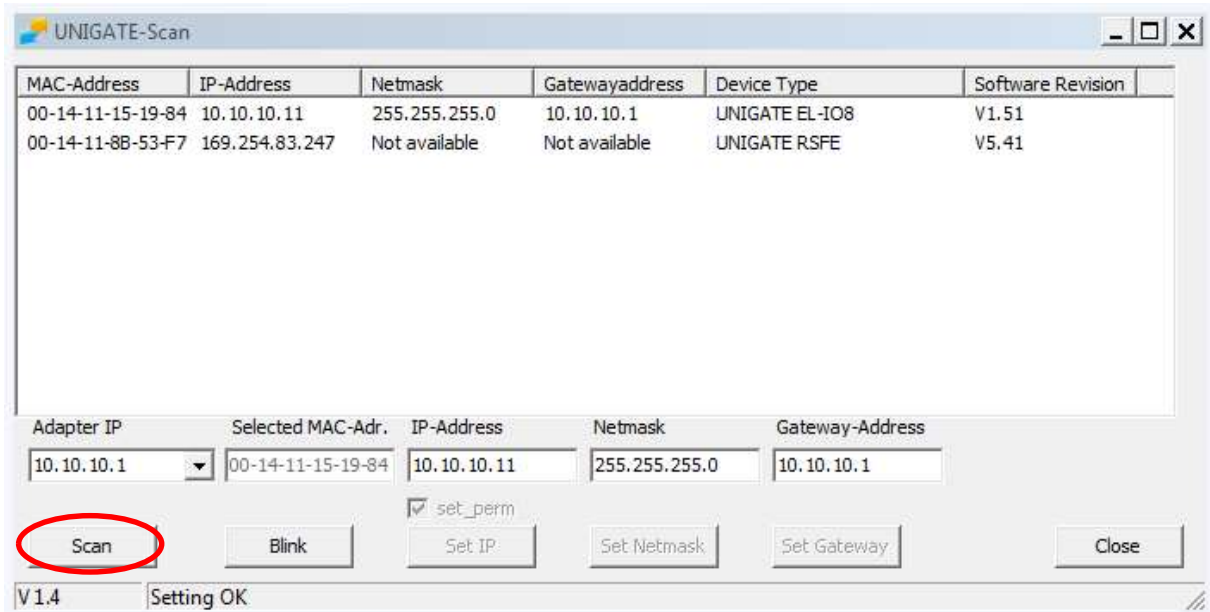
☒ set_perm

V1.4 Reading OK

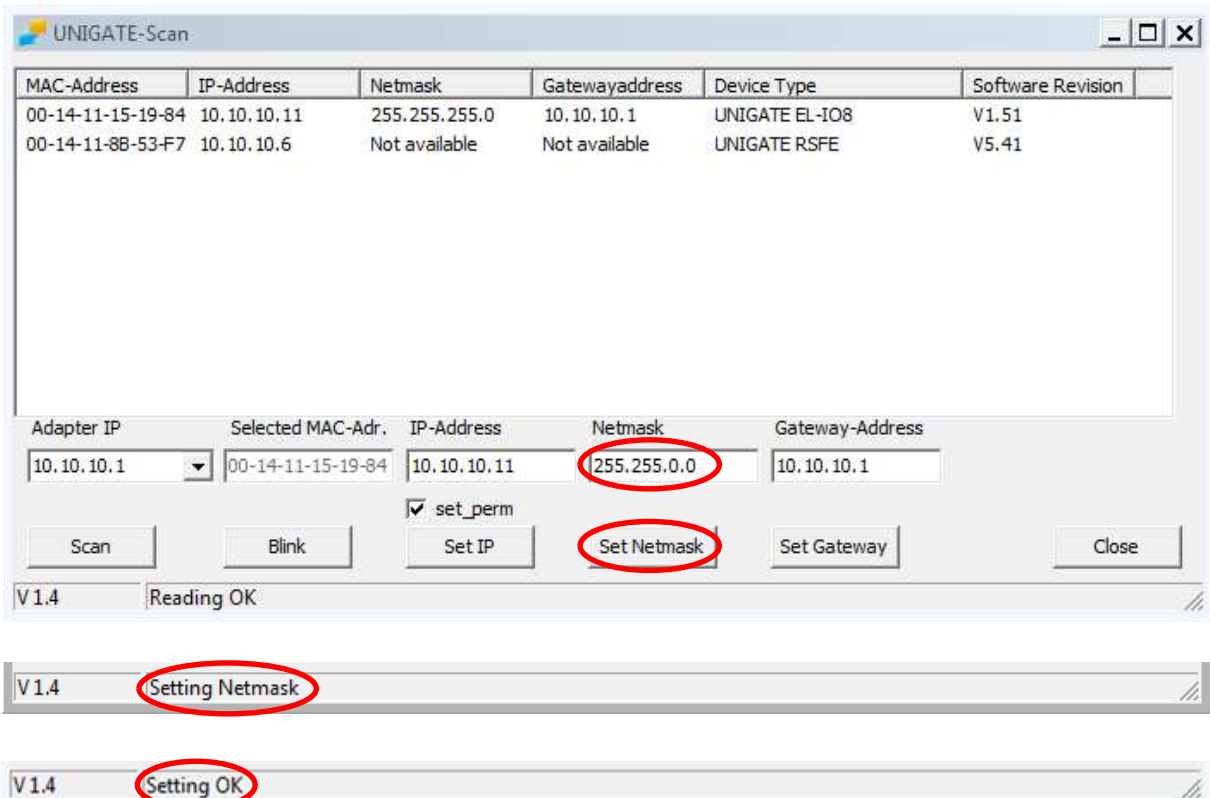
V1.4 Setting IP

V1.4 Setting OK

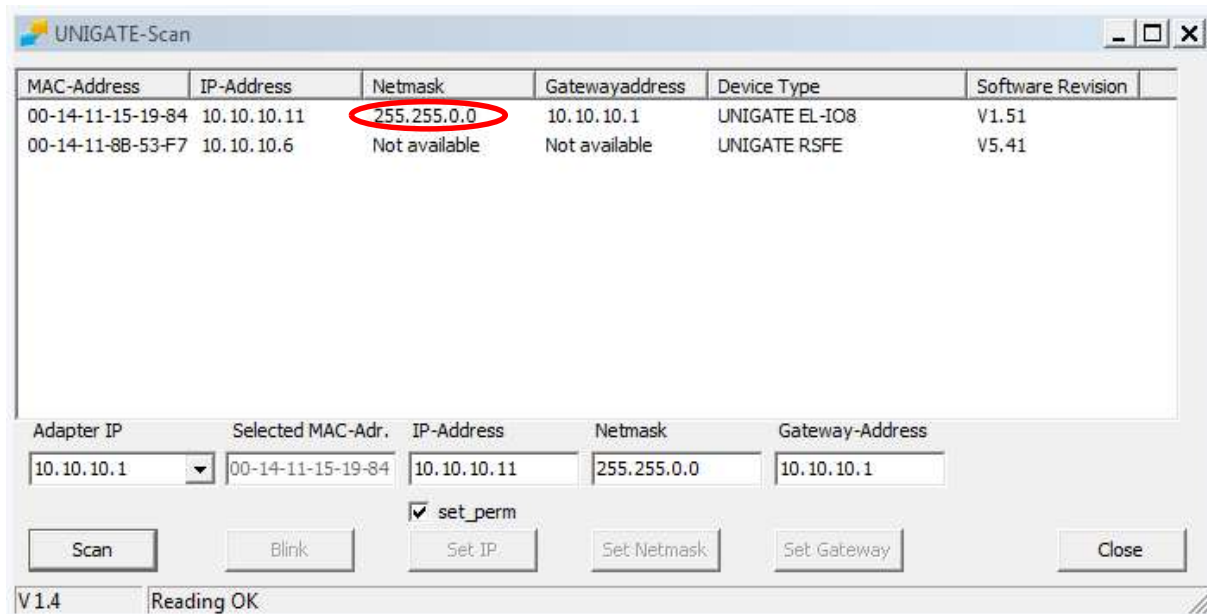
7.2 Subsequently, a scan can be performed again via the "Scan" button to check whether the previously set IP address has been accepted by the UNIGATE.



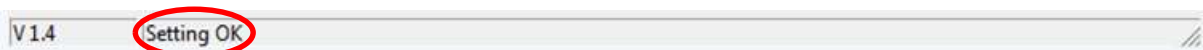
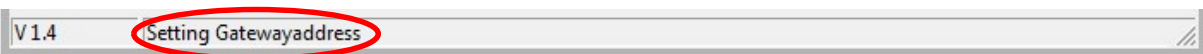
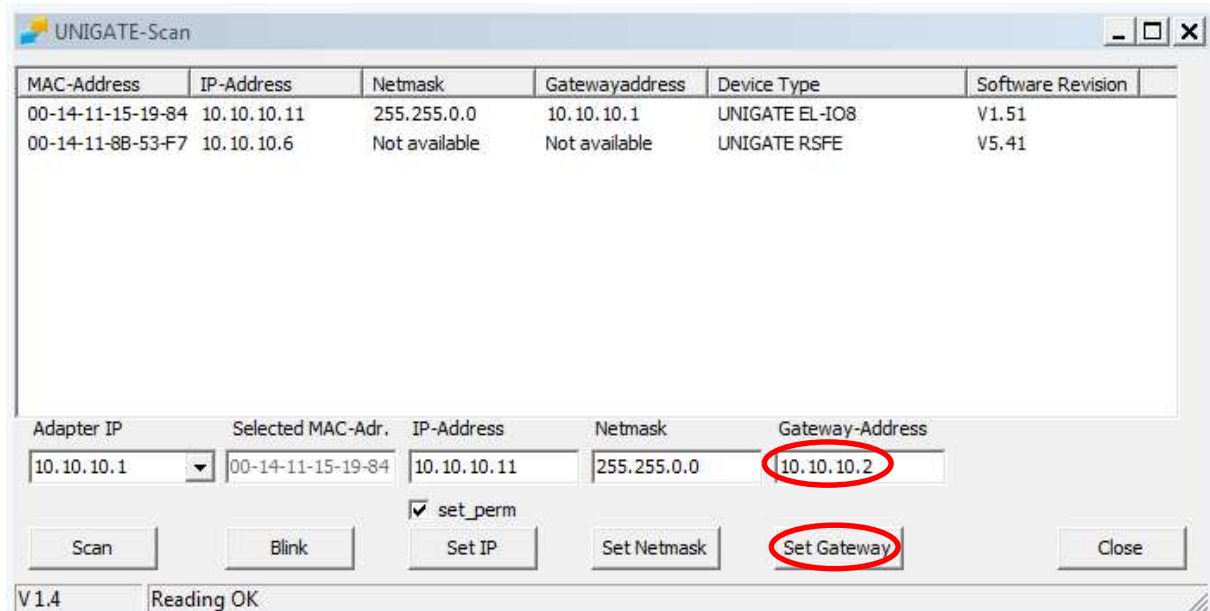
7.3 **Netmask:** The desired netmask can now be entered in the input mask and assigned to the UNIGATE® via the "Set Netmask" button. In the status bar, the message "Setting Netmask" appears, followed by the message "Setting OK".



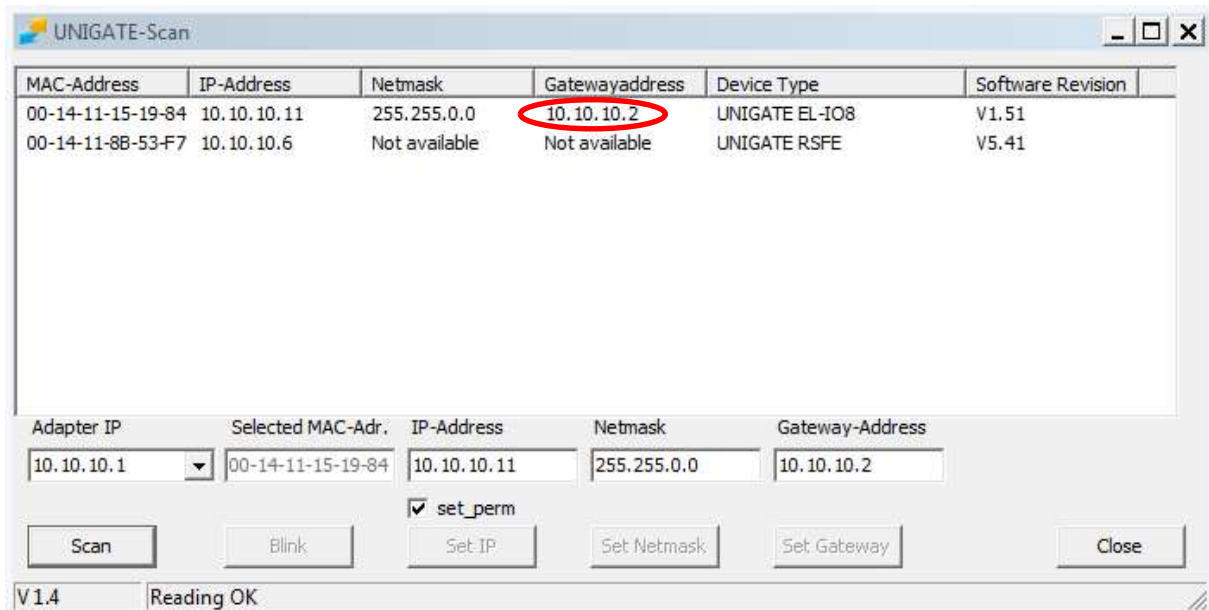
7.4 Subsequently, a scan can be carried out again via the "Scan" button to check whether the previously set Netmask has been taken over by the UNIGATE.



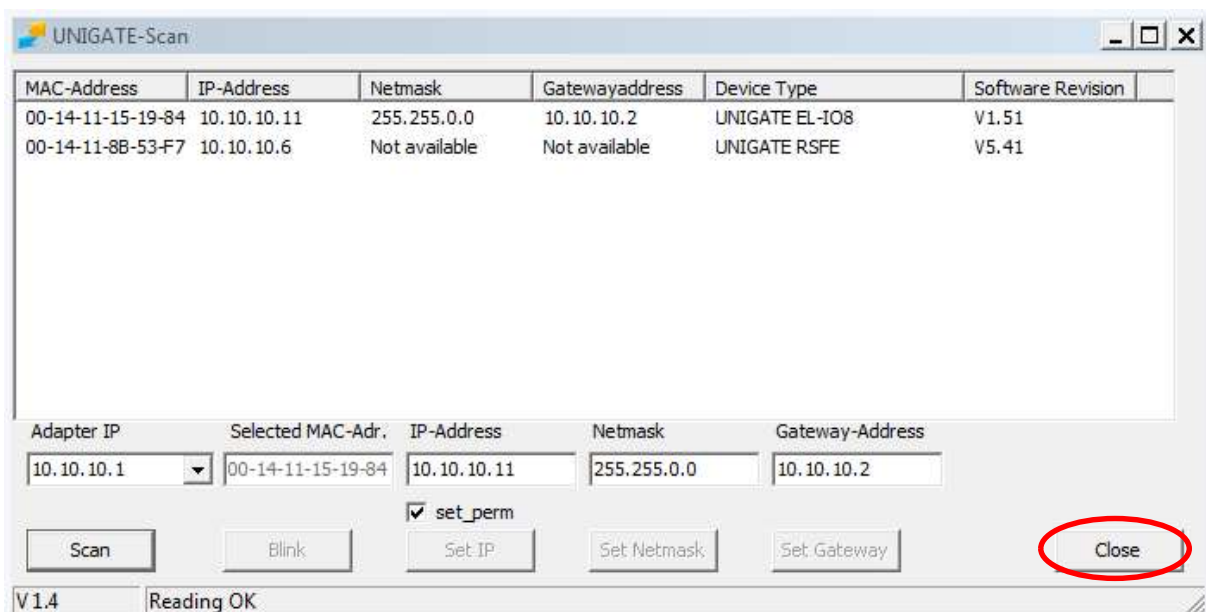
7.5 **Gateway-address:** Gateway-Address: The desired gateway-address can now be entered in the input mask and assigned to the UNIGATE® via the button "Set Gateway". In the status bar, the message "Setting Gatewayaddress" appears, followed by the message "Setting OK".



7.6 Subsequently, a scan can be performed again via the "Scan" button to check whether the previously set gateway address has been adopted by the UNIGATE.



8. The program can be ended with the "Close" button.



5 Servicing

Should questions arise that are not covered in this manual you can find further information in our

FAQ/Wiki area on our homepage www.deutschmann.com or directly in our Wiki on www.wiki.deutschmann.de

If your questions are still unanswered please contact us directly.

Please note down the following information before calling:

- Device designation
- Serial number (S/N)
- Article number
- Error number and error description

Your request will be recorded in the Support center and will be processed by our Support Team as quickly as possible (Usually in 1 working day, rarely more than 3 working days.).

Technical Support hours are as follows:

Monday to Thursday from 8 am to midday and from 1 pm to 4 pm, Friday from 8 am to midday (CET).

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6 Returning a unit

If you return a unit to us, we require as comprehensive a description of the error as possible. We require the following information in particular:

- What error number was displayed?
- How is the unit externally wired (encoders, outputs, ..)? Please state all connections of the unit.
- What is the magnitude of the 24V supply voltage ($\pm 0.5V$) with connected LOCON?
- What were you last doing on the unit (programming, error on power-up, ...)?

The more precise your information and error description, the more precisely we can check the possible causes.