

Accessing the Browser Based Configuration Guide

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Overview

This guide will walk through locating and setting the IP adress settings of the gateway. This guide will also walk through troubleshooting techniques and methods to get your gateway up and running.

For specific questions, you can call Real Time Automation at 1-800-249-1612 or via e-mail at support@rtaautomation.com.



Connecting to the Browser Based Configuration Webpages

To access the browser based configuration of the gateway, both the PC being used to access the webpages and the gateway must be on the same network. By default, the gateway is set to DHCP.

There are 3 steps for getting connected to the gateway:

- 1) Set IP Address on computer to Obtain IP Address Automatically or DHCP and connect the gateway to the computer using the Crossover cable provided.
 - a. If network supports DHCP, then both the computer and the RTA gateway will be able to obtain a valid IP Address.
 - b. If network does not support DHCP, then the computer will fall back to an Auto-IP Failed address that is 169.254.x.y, where x and y are random values.
 - i. The RTA gateway will also obtain an Auto-IP Failed address.
- 2) Once the computer gets an IP Address, open IPSetup.exe version 2.3 (latest), and the gateway should appear.
 - a. IPSetup.exe can be loaded from the CD-ROM or download the program from our webpage <u>http://www.rtaautomation.com/product/460-gateway-support/</u>.
 - b. If the gateway doesn't appear, then follow troubleshooting steps outlined in this document.
- 3) Once the gateway appears, select it and press Launch Webpage.



Step 1 - Setting Computer to DHCP

To connect to the RTA gateway, your computer should be set to DHCP. To set your computer to DHCP, follow the directions below. They have been split up according to the operating system on the computer:

- If Using Windows 7/8
- If Using Windows 10
- If Using Windows XP

Once the computer has been changed, skip to Step 2- Discovering IP Address of Gateway.



If Using Windows 7/8:

- 1) From your Start menu, open the Control Panel.
- 2) Click on Network and Sharing Center.

View your act	ive networks		Connect or disconnect
þ	rta.local	Access type:	Internet
	Domain network	Connections: 🏺	Local Area Connection 2
	Unidentified network	Access type:	No Internet access
	Public network	Connections: 🏺	Local Area Connection

- 3) Click the Local Area Connection adapter.
- 4) Click the **Properties** button.
- 5) Under the Networking tab, select "Internet Protocol Version 4 (TCP/IPv4)" and click **Properties**.

Networking Sharing
Connect using:
Realtek PCIe GBE Family Controller
Configure
This connection uses the following items:
File and Printer Sharing for Microsoft Networks Rawether NDIS 6.X MPR Protocol Driver Rawether NDIS 6.X SPR Protocol Driver Intermet Protocol Version 6 (TCP/IPv6) Intermet Protocol Version 4 (TCP/IPv4)
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

6) Select option "Obtain an IP address automatically" and click **OK**.

Use the following IP address: IP address: Subnet mask:	Obtain an IP address automatically	у		
IP address: Subnet mask:	Use the following IP address:			
Subnet mask:	IP address:			
	Subnet mask:			
Default gateway:	Default gateway:			

7) When done, skip to <u>Step 2- Discovering IP Address of Gateway</u>.



If Using Windows 10:

- 1) From your Start menu, go to Settings.
- 2) Click Network & Internet.
- 3) Select Ethernet on the left-hand side and then click **Network and Sharing Center** under Related settings.



4) Click the Local Area Connection adapter.



5) Click the **Properties** button.



6) Under the Networking tab, select "Internet Protocol Version 4 (TCP/IPv4)" and click **Properties**.

Networking Sharing
Connect using:
Realtek PCIe GBE Family Controller
Configure
This connection uses the following items:
File and Printer Sharing for Microsoft Networks Rawether NDIS 6.X MPR Protocol Driver Rawether NDIS 6.X SPR Protocol Driver Intermet Protocol Version 6 (TCP/IPv6) Intermet Protocol Version 4 (TCP/IPv4) Intermet Protocol Version 4 (TCP/IPv4) Intermet Protocol Version 9 (TCP/IPv4) Intermet Pr
Install Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

7) Select option "Obtain an IP address automatically" and click **OK**.

Obtain an IP address automaticall Output Use the following IP address:	у		
IP address:			
Subnet mask:			
Default gateway:			

8) When done, skip to <u>Step 2- Discovering IP Address of Gateway</u>.



If Using Windows XP:

- 1) From your Start menu, open the Control Panel.
- 2) In Classic View: Click Network Connections.

In Category View: Click Network and Internet Connections and then Network Connections.

- 3) Right-click the network you are using to connect the RTA Gateway to and click **Properties**.
- 4) On the General tab, select the "Internet Procotol (TCP/IP)" and click **Properties**.

🚣 Local Area Connection Properties 🔋 🔀
General Advanced
Connect using:
Broadcom 440x 10/100 Integrated C
This connection uses the following items:
Client for Microsoft Networks Client for Microsoft Networks Bernet Protectule: Thternet Protocol (TCP/IP)
Install Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks
Show icon in notification area when connected ✓ Show icon in notification area when connected ✓ Notify me when this connection has limited or no connectivity
OK Cancel

5) Select option "Obtain an IP address automatically" and click **OK**.

Obtain an IP address automatical	ly		
Ouse the following IP address:			
IP address:			
Subnet mask:			
Default gateway:			

6) When done, skip to <u>Step 2- Discovering IP Address of Gateway</u>.



Step 2 - Discovering IP Address of Gateway

1) Run the IPSetup.exe program from the CD-ROM or download the program from our webpage <u>http://www.rtaautomation.com/product/460-gateway-support/</u>.

NOTE: Make sure you have the latest version of the IPSetup tool available at the link above.

-NDK Settings- IP	þ		0	19	0		0		Select	a Unit	EX) 5 (00-()3-F4-08-I	FA-2B1Au	toIP at 169.25
Network Mask	0	<u>a:</u>	0	20	0	ب د	0			0004				
GateWay	0	15	0		0	•	0	Set>						
DNS [0	•	0	÷.	0	÷	0							
Baudrate 🛛	11520	00		_	_	_	•		! • 					
										_	Se	earch Aga	ain	
								Laun	ch Webo	age	Advan	ced	Help	

- 2) When the program starts up, it will do a search the network for all RTA gateways which wil appear under "Select a Unit".
 - a. Determine if DHCP was successful or has failed:
 - i. You will know DHCP has failed if the gateway's IP address is AutoIP.
 - ii. If successful, it will say DHCP'd at a defined IP adress.
 - b. If you do not see the gateway in this tool, then your PC is most likely set up as a static IP. To verify IP Address of PC, see <u>Troubleshooting Discovering IP Address of PC</u>.
 - i. Change your PC's network settings to be DHCP. If DHCP fails, then it will change to be on the 169.254.x.y network. Refer to Step 1 in this document on <u>Changing Computer to be set for DHCP</u>.
 - ii. Relaunch the IPSetup.exe tool to see if gateway can now be discovered.
- If gateway can be found and IP Address is acceptable for your network, click the Launch Webpage button to continue setting up the gateway.
 - a. If Launch Webpage fails, then the gateway and the PC are not on the same network. Change networks to match. See troubleshooting steps in this document.
 - b. If the PC and gateway are on the same network but the webpage fails to launch, verify using command prompt that the gateway can be accessed via ping (see <u>Troubleshooting</u> section). If ping fails, then the gateway cannot be viewed in a browser.



- 4) If the IP Address of the gateway can be found but needs to be changed, click the gateway under "Select a Unit" and then modify the IP Settings on the left-hand side of the tool. When done, press the **Set** button to change the gateway's network settings.
 - a. The unit will automatically reboot.
 - b. If Network Settings have changed, be sure to change the computer to be on the new network as well before trying to access the gateway's web page.



Troubleshooting – Discovering IP Address of PC

- 1) Go into your Start menu and open the Run dialog box.
 - a. Shortcut for this menu is 🗱 + R
- 2) Type "cmd" and press **OK**. This opens the command prompt screen.
- 3) To find out what IP address your PC is set to on the Ethernet Port you are using, type "ipconfig" and press Enter.

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.
                                                 All rights reserved.
C:\Users\EBrockman.RTA>ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection 2:
   Connection-specific DNS Suffix . : rta.local
Link-local IPv6 Address . . . . : fe80::3034:a7e5:5adf:4232%15
IPv4 Address. . . . . . . : 192.168.47.36
Subnet Mask . . . . . . . . . : 255.255.255.0
   . . : 192.168.47.1
Ethernet adapter Local Area Connection:
   fe80::10c3:48ad:d151:fc1%11
                                             10.1.54.40
   Tunnel adapter isatap.rta.local:
   Media State . . . . . . . . . : Media disconnected
Connection-specific DNS Suffix . : rta.local
Tunnel adapter Teredo Tunneling Pseudo-Interface:
   Media State . . . . . . . . . . . Media disconnected
Connection-specific DNS Suffix . :
Tunnel adapter isatap.{8D375A43-EC69-40BA-8ABA-4F71E1114E7B}:
                                      . . : Media disconnected
   Media State .
   Connection-specific DNS Suffix
```

4) A list will be outputted similar to above. On this PC, there are 2 Ethernet Connections: Local Area Connection 2 and Local Area Connection. It is important to know which port you are using if there is more than one listed.

This information gathered here is important when troubleshooting whether the gateway and the computer are on the same network.



Troubleshooting – Using Command Prompt

If the Main Page does not launch, then the IP Address or Subnet Mask of the gateway and the computer likely don't match. Correct the IP Address and Subnet and try again. If you do not know the IP Address or Subnet use the following procedure:

- 1) Go into your Start menu and open the Run dialog box.
 - a. Shortcut for this menu is 🗱 +R
- 2) Type "cmd" and press **OK**. This opens the command prompt screen.
- 3) Type ipconfig and press enter.
- 4) Take note of the IP Address and Subnet Mask.
- 5) To test the communication between the PC and the gateway type ping (###.###.####) in the prompt and press **Enter**. The (###.###.####) is the IP Address the gateway is set to. If the device is connected to the network properly, the ping will show a response.

C:\WINDOWS\system32\cmd.exe	- 🗆 🗙
C:\>ping 192.168.0.100	
Pinging 192.168.0.100 with 32 bytes of data:	
Reply from 192.168.0.100: bytes=32 time<1ms TTL=128 Reply from 192.168.0.100: bytes=32 time<1ms TTL=128 Reply from 192.168.0.100: bytes=32 time<1ms TTL=128 Reply from 192.168.0.100: bytes=32 time<1ms TTL=128	
Ping statistics for 192.168.0.100: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 0ms, Average = 0ms	
C:\> <	- - //

Successful Ping

 If unsuccessful ping occurs, see see <u>Troubleshooting – Using Terminal.exe</u>. Otherwise, open a web browser and enter the IP Address of the gateway in the URL and continue with your normal gateway configuration.



Ping Failure



Troubleshooting - Using Terminal.exe (-N700, -N34, -NNA1, -N70U, -N70L, N70PB Platforms only)

If the Main Page does not launch, then the gateway's IP Address most likely is not on the same network as the computer. Correct the IP Address and try again. If you do not know the gateway's IP Address use the following procedure:

- 1) Run Terminal.exe, which can be loaded from the CD-ROM or download the program from our webpage http://www.rtaautomation.com/product/460-gateway-support/
- 2) Connect via RS232 to the gateway. To find which platform you are using, see <u>Appendix A -</u> <u>Hardware Platforms</u> section in this userguide.
 - For –N700, -N70U, -N70PB, -N70L Platforms:
 - Connect a DB9 Null Modem cable to Port 0.
 - For –N34 Platform:
 - Connect a DB9 Null Modem cable to Port 1.
 - For –NNA1 Platform:
 - Connect 3 wires to TX, RX and COM in the 5-pin Terminal Strip
- 3) In Terminal.exe, select the PC's COM Port that you are connected to.
- 4) Select the Baud Rate of 115200, 8 Data Bits, 1 Stop Bit, and Parity: None.
- 5) Click Connect.
- 6) Cycle power to the gateway. Immediately typing "A" in Terminal.exe + pressing enter.



Terminal vd. 9b. 200600208, by Brows
Disconnect COM Pot BeScan Baud rate Data bits Parity Stop bits Handshaking Uisconnect COM For BeScan COM Tot COMS Com C 1400 57600 C 5 © none © NONE <td< td=""></td<>
Set font Auto Dis/Connect Time Stream log custom BR Rx Clear AscIltable Scripting AutoStart Script CR=LF Stay on Top 9600 27 ★ Graph Remote
Receive CHEX Dec Bin StartLog StopLog REQ_RES CLEAR Reset Counter 13 Counter = 20 CHEX Dec Bin StartLog StopLog REQ_RES
Netburner SB72EX Monitor V1.0 Jul 2 2004 12:06:03 HELP for help hb>setup MAC address=00-03.F4-04-3B-BF 1.)IP Address = 192:108.0.134 2.)IP Mask = 255:255:255.0 3.)IP Gateway =0.0.00 4.)TTP Server=0.0.0.0 5.)TTP FIle = 6.)Baudrate =115200 7.)Wwatk = 22 8.)Boot to Application 9.)Exceptions CauseReboot A.)DNS Server =0.0.0.0 B.)Boot to GauseReboot A.)DNS Server =0.0.0.0 B.)Boot to Application 9.)Exceptions CauseReboot A.)DNS Server =0.0.0.0 B.)Boot Port =0 C.)Switch to Guidet Boot
Transmit CLEARSend File 0 🚖 Г CR=CR+LF 0KDTRRTS
Macros Set Macros M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12
Connected Rx: 468 Tx: 7

- 7) If successful, there will be a prompt "nb>". If unsuccessful, then repeat step 6 until prompt is shown.
- 8) Type "setup" and enter. This will show you all of the Network settings plus some additional fields.
- 9) To change the IP Address, enter a value of 1. To change the Subnet Mask, enter a value of 2. To change the Default gateway, enter a value of 3. Multiple changes can be made before saving. Once all changes are completed, type "s" and enter to save all the changes. The gateway will restart.
- 10) Attempt to ping the device. If successful, browse to the main page and continue with normal gateway configuration. If unsuccessful, repeat these steps or contact Real Time Automation for further diagnostics.



Appendix A - Hardware Platforms

RTA supports a number of different hardware platforms. There are differences in how they are powered, what serial settings are supported, and some diagnostic features supported (such as LEDs). For these sections, be sure to identify the hardware platform you are using.

To find which hardware platform you are using:

- 1) Look on the front or back label of the unit for the part number.
- 2) On the webpage inside the gateway, navigate to the dropdown menu under **Other** and select **Utilities**. Click the **Listing of Revisions** button. The full part number is displayed here.

Once you have the full part number, the platform will be the number following the "-N". Some examples of different product families are shown below:

