cimetrics B3075 BACnet-IP to BACnet-IP Router User Guide

cimetrics B3075 BACnet-IP to BACnet-IP Router

Contents

**B3075 Cimetrics BACnet/IP to BACnet/IP Router**

Configuration port
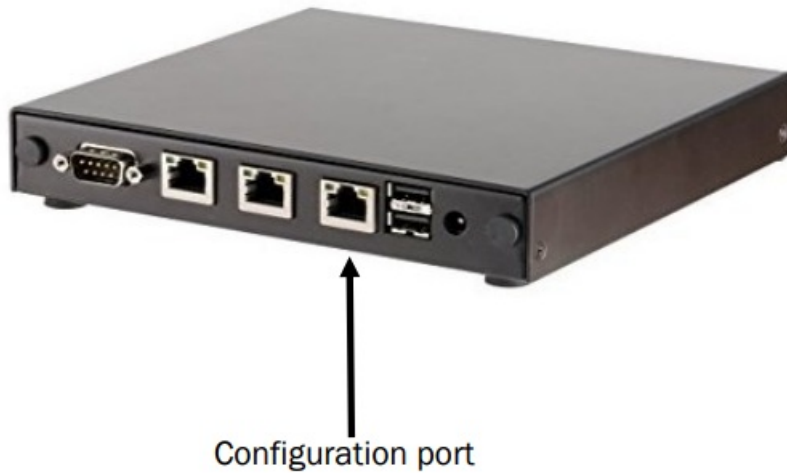
Starting the B3075 for the first time

You must configure your router before connecting it to a BACnet network

Before you can configure the router, you need to establish a connection between a PC and the B3075. Your **B3070/ B3075** has three Ethernet ports—one of them is a dedicated configuration port. Connect your B3075's configuration port and your PC's Ethernet port to an Ethernet network, as shown below; standard Ethernet cables should be used. The B3075's network communication parameters for its configuration port are preset and cannot be changed.
That port has a fixed IP address: **169.254.14.14**

The personal computer must not use DHCP, but rather it should use the following IP **address:** 169.254.14.10. The PC's Subnet Mask must be set to **255.255.0.0**.

Ethernet Switch or Hub

169.254.14.10
255.255.0.0
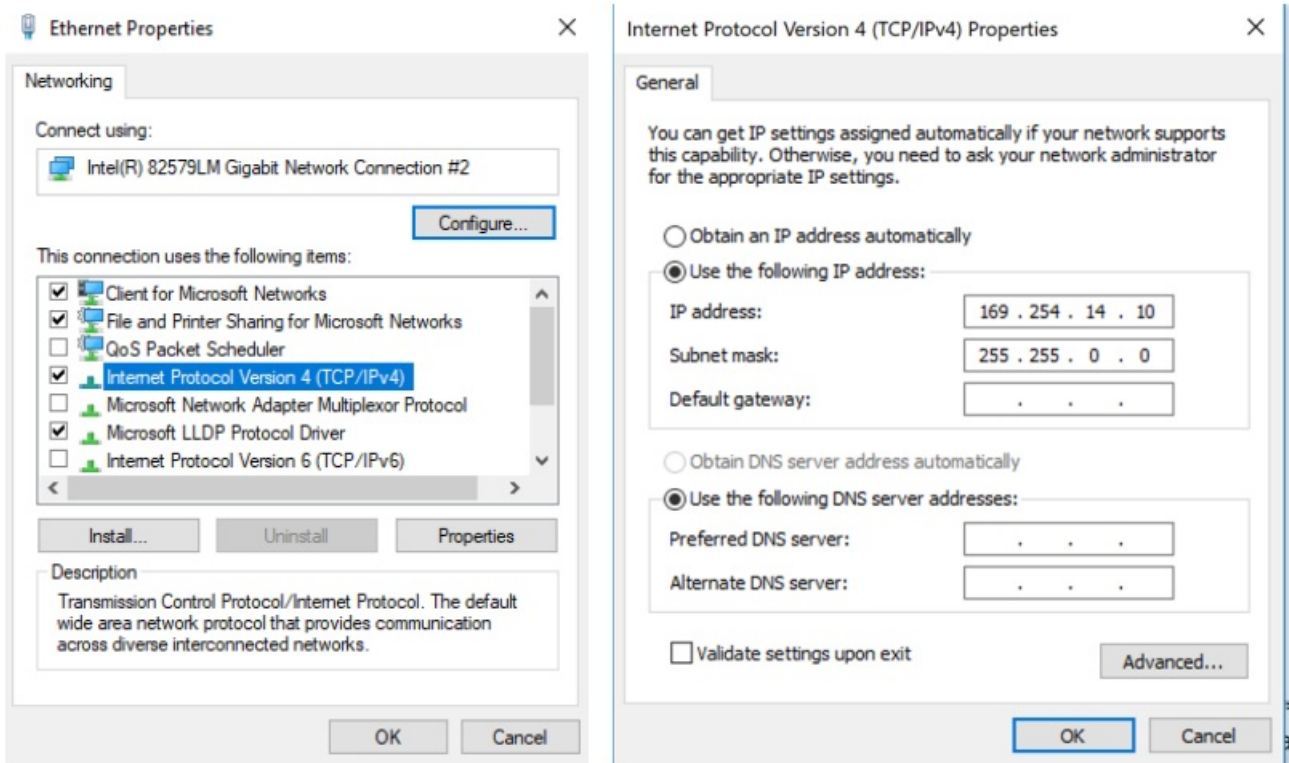
169.254.14.14
255.255.0.0
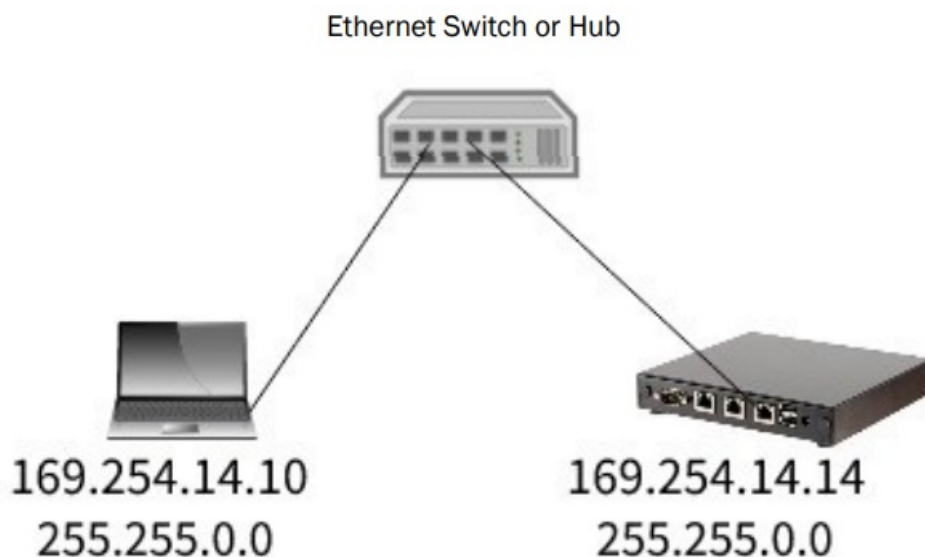
How to set the IP address on your Windows PC

To set your IP address, follow these steps:

1. Open the PC's Control Panel app.
2. Navigate to Network and Internet – Network and Sharing Center – Change Adapter Settings
3. Right click on the Ethernet adapter you are using to communicate – Properties — Internet Protocol Version 4 –

Properties – Use the following IP address — **169.254.14.10**

and Subnet Mask — 255.255.0.0. Click the "OK" button.

Ethernet Properties ✕	Internet Protocol Version 4 (TCP/IPv4) Properties ✕
Networking	**General**
Connect using:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
🖥 Intel(R) 82579LM Gigabit Network Connection #2	
[Configure...]	○ Obtain an IP address automatically
This connection uses the following items:	⦿ Use the following IP address:
☑ 🖥 Client for Microsoft Networks	IP address: 169 . 254 . 14 . 10
☑ 🖥 File and Printer Sharing for Microsoft Networks	Subnet mask: 255 . 255 . 0 . 0
☐ 🖥 QoS Packet Scheduler	Default gateway: . . .
☑ 🖥 Internet Protocol Version 4 (TCP/IPv4)	
☐ 🖥 Microsoft Network Adapter Multiplexor Protocol	○ Obtain DNS server address automatically
☑ 🖥 Microsoft LLDP Protocol Driver	⦿ Use the following DNS server addresses:
☐ 🖥 Internet Protocol Version 6 (TCP/IPv6)	Preferred DNS server: . . .
[Install...] [Uninstall] [Properties]	Alternate DNS server: . . .
Description	
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	☐ Validate settings upon exit [Advanced...]
[OK] [Cancel]	[OK] [Cancel]

4. Now you are ready to communicate with the router

Login to the B3075

Plug your PC and B3075 (configuration port) into the same Ethernet hub or switch. On the PC, open a web browser and type the IP address of the B3075's configuration port – 169.254.14.14 then press **ENTER.**

❗ The router must have completed the start-up phase (check that the Power LED in front is steady green); otherwise the required web pages will not be visible.
You will be prompted to login: The username is admin and the password is provided with your router (see the sticker affixed to the router).

❗ Keep the admin account password in a secure location and never lose it! If it is lost, you will need to reset the router to its factory defaults.

Once you login using the default admin account password, you will see a home page. See the reverse side for a partial list of the router's configuration parameters.

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**B3075 Configuration: Partial Checklist**

The first decision that you will need to make is whether to configure the B3075 to use GSA compliance mode. In

that mode, you will be required to set several parameters for proper operation on GSA's networks before the B3075 will function as a BACnet router, whereas in the non-GSA mode you will have more configuration flexibility. In any case, you will need to set several configuration parameters to appropriate values for your site's BACnet internetwork in order to ensure proper interoperation.

Feature	Items	Notes/Comments
BACnet Device	BACnet Device Instance Number	
Customer Network Interface (usually connected to the building's backbone network)	IP Address	
	Subnet Mask	
	Default Gateway IP Address (if needed)	
	BACnet UDP Port (typically 47808)	
	BACnet Network Number	
Private Network Interface (connected to a BACnet/IP LAN)	IP Address	
	Subnet Mask	
	BACnet UDP Port (typically 47808)	
	BACnet Network Number	
BBMD (optional, if needed on the Customer Network)	BBMD table (if BBMD functionality is enabled)	
Configuration Interface (used only for router configuration)	IP address = 169.254.14.14 fixed

Subnet mask = 255.255.0.0 fixed

Admin and read-only user account passwords | |
| **Physical Space** | DIN rail mounting—mounting dimensions are

6.5" hor. X 6.0" vert. x 1.25" deep.

Allow approximately 1.0" inch gap from other equipment for air flow. | |
| **AC Power** | AC 100-240 Vrms, 50/60 Hz

Type B (3 pin) | |

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Documents / Resources
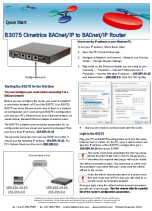
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B3075 BACnet-IP to BACnet-IP Router, B3075, BACnet-IP to BACnet-IP Router, BACnet-IP Router, IP Router, Router

References

- **Cimetrics - BACnet Stack (BACstac), BACnet products, Analytika service**

Manuals+,