LINXON myRGA

THEORY AND OPERATION

Module 400:
How to Communicate with the RGA

PURPOSE

- Develop and demonstrate expertise with LINXON myRGA

- Understand how myRGAs are connected to, and communicate with, computer systems.

MAIN OBJECTIVES

- Identify IP address and subnetwork structure

- Change a PCs IP address

- Identify myRGA's default IP address

- Change myRGA's IP Address

OUTLINE

1 Ethernet TCP/IP networking principles

2 Connecting myRGA to a network

3 Changing the RGA's IP address

4 Changing the PC's IP address

5 Network troubleshooting

ETHERNET TCP/IP

1

NETWORKING PRINCIPLES

IP ADDRESSES

- IP addresses are assigned to identify specific devices on a
  given network

- Static IP Address vs. DHCP (Dynamic Host Communication Protocol)
  - Static IP Address (manually setting an IP address) is recommended
  - If the IP address changes then communication will be lost between the
    software and the RGA.
  - DHCP IP Address is automatically set by the host

- IPv4 Addresses
  - Example 192.168.1.100

SUBNETWORKS

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Subnetworking is a method of logically dividing an IP network

- IP Address – Unique identifier for each device

- Subnet Mask – Determines the portion of the IP address that is the network prefix

- Network Prefix – Same for all devices on a subnet

	Example 1	Example 2
IP address	192.168.1.104	192.168.1.105
Subnet mask	255.255.255.0	255.255.0.0
Network prefix	192.168.1.0	192.168.0.0

myRGA DEFAULT IP ADDRESS

Factory Default IP Address

- Every myRGA is shipped from the factory with a default IP address of:

192.168.1.100

2 CONNECTING myRGA TO A NETWORK

CONNECTING myRGA TO A NETWORK

There are a few questions you need to ask before starting with the connection process:

- Upon which type of network will myRGA be installed?
    - Direct connection to a PC?
    - Local network?
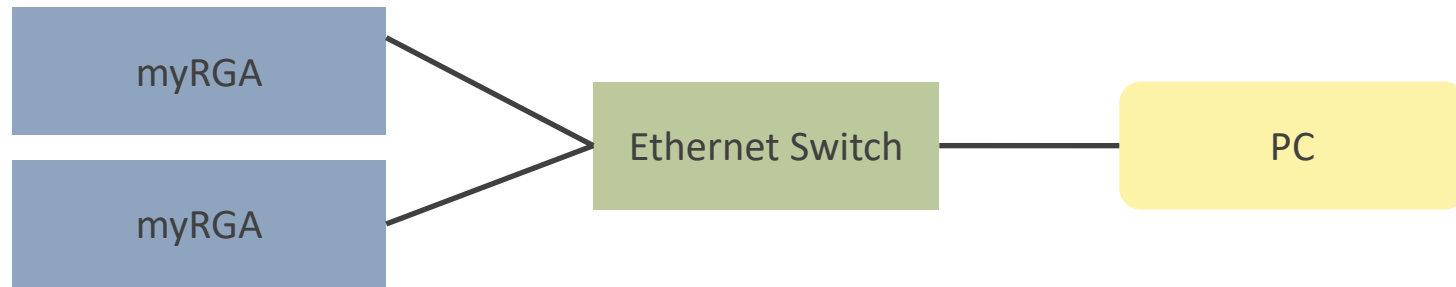- Is more than one myRGA going to be set up at this time?

CONNECTING ONE RGA TO ONE COMPUTER

| myRGA | Ethernet switch | PC |

OR

| myRGA | PC |
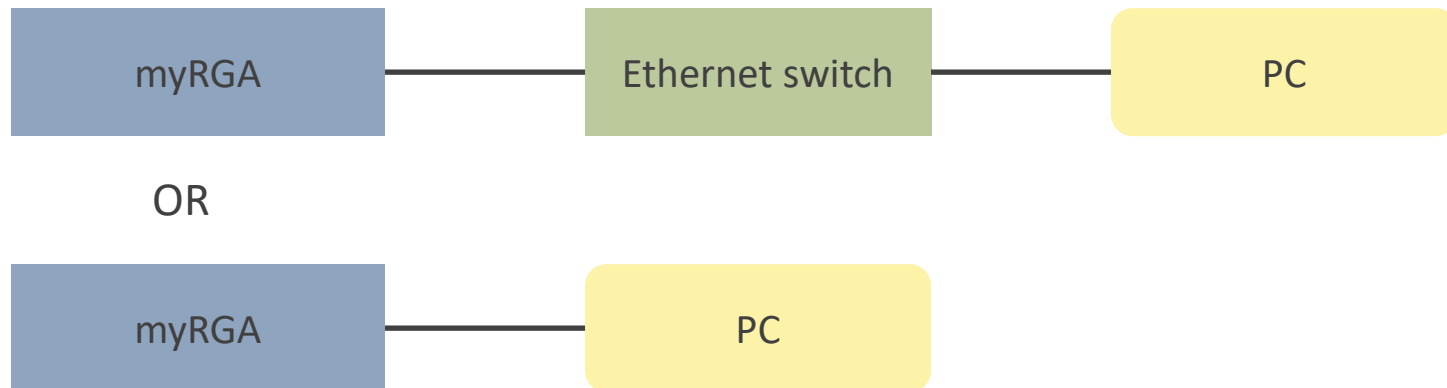
CONNECTING A SINGLE RGA
TO A LOCAL NETWORK
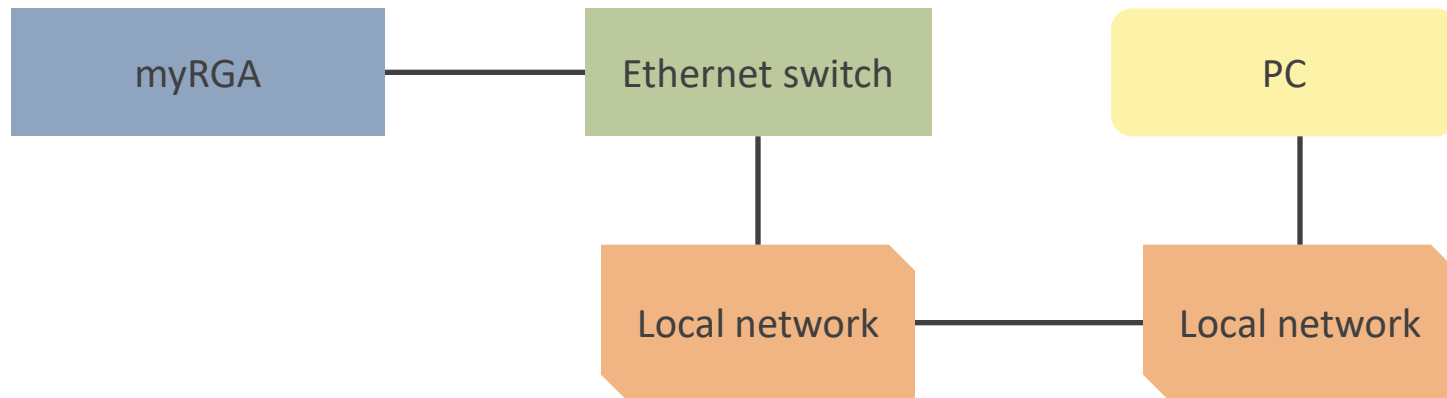
CONNECTING MULTIPLE RGAS
TO ONE COMPUTER

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PC with one Ethernet (LAN) Port and an Ethernet Switch

-OR-

PC with multiple Ethernet (LAN) Ports
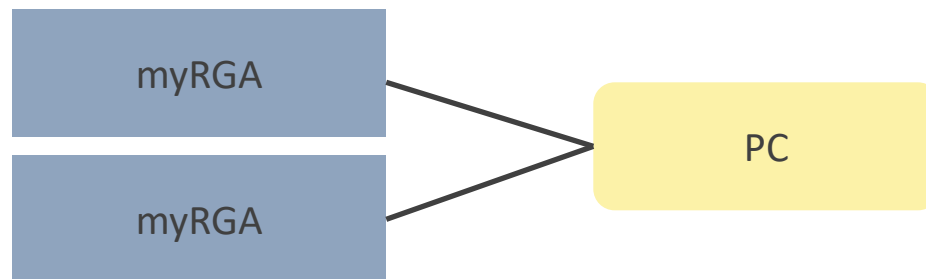
CONNECTING MULTIPLE RGAs TO A LOCAL NETWORK
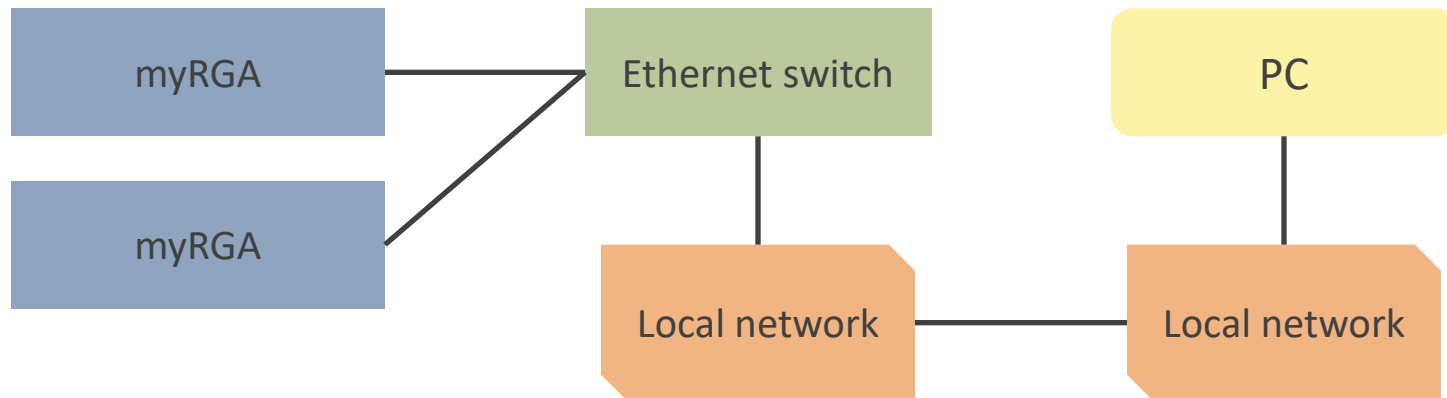
3 CHANGING THE RGA'S IP ADDRESS

SETTING RGA IP ADDESS

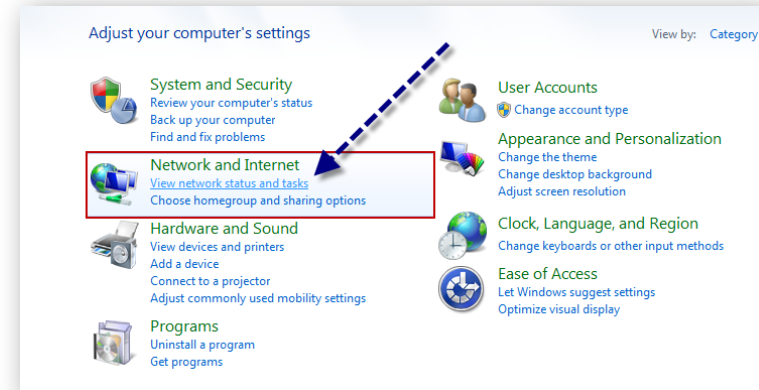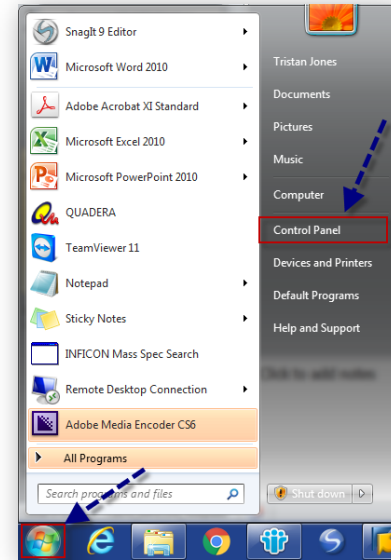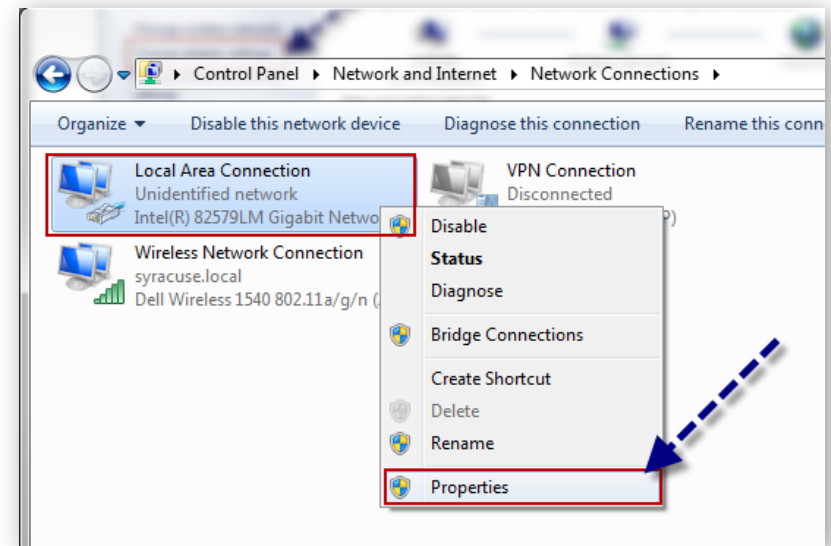The onboard web server can be used to change the IP address of an RGA
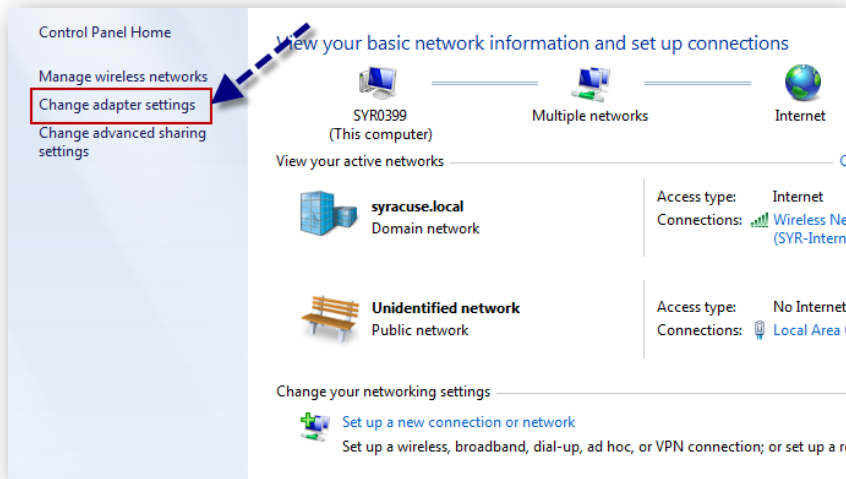
4 CHANGING THE PC'S IP ADDRESS

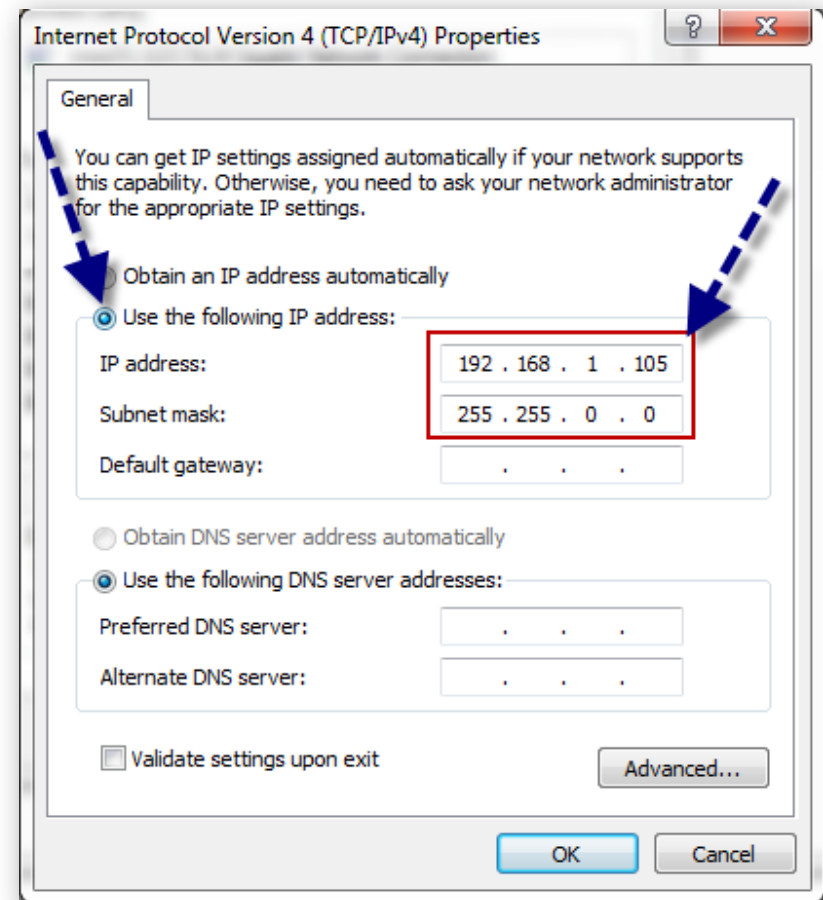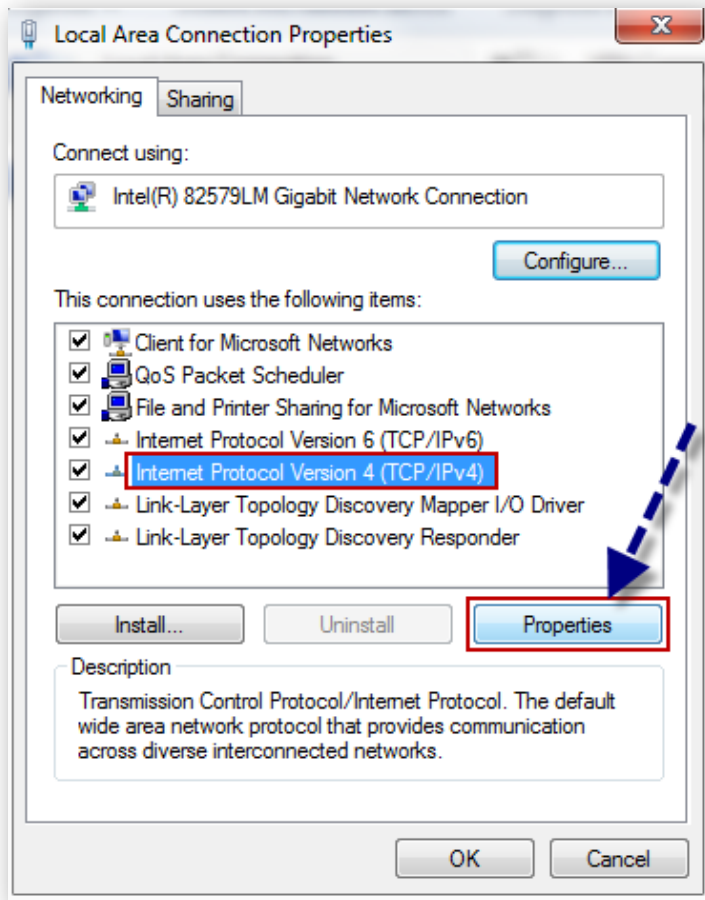# CHANGING THEPC'S IP ADDRESS

- To ensure the myRGA can properly communicate with the connected computer, the computer must have the correct network setup

CHANGING THE PC'S IP ADDRESS

CHANGING THE PC'S IP ADDRESS

5 NETWORK TROUBLESHOOTING

NETWORK TROUBLESHOOTING

Ping RGA IP Address?	Onboard Web Server Com?	Suggested Steps
NO	N/A	Check the IP address of the myRGA and the PC to ensure compatibility
YES	NO	Check Firewall, Antivirus (port 80) permissions and Windows permissions (administrator privileges)

SUMMARY

Now that you have completed this module you should be able to;

- Identify IP address and subnetwork structure

- Change a PC's IP address

- Identify the myRGA default IP address

- Change the myRGA IP address

THANK YOU!

You have completed the

RGA Hardware and How an RGA Works module!

You may come back and review

the content of this module at any time.