Default Gateway in Networking

Routing is the most important process in networking. The process of routing includes various networking devices for packet forwarding one of which is the default gateway. The default gateway forwards the packets from the client to other network. This article is about a detailed description of the default gateway, its uses, and how it works in networking.
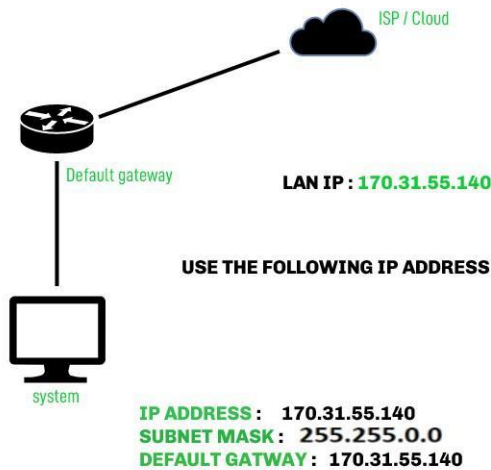
Default Gateway:

- The default gateway is the node that forwards the packet from the source to other networks when there is no routing information about the destination i.e. host (or router) does not know where the destination is present.
- A default gateway is a route to which information is passed when the device does not know where the destination is present.
- It is used when there is no routing information available about the destination.
- It is a node that allows the communication of computers on different networks.
- 'Default' here means the default route which is to be taken when the host does not know where the destination is.
- It is most commonly used for webpage access.
- This is an important part of networking for routing the data and finding the corresponding destination which is in another network.

When Default Gateway is Used:

When the source wants to reach a destination which is outside its network then, the source uses the default gateway to forward the data and locate the destination's network so that data should reach its intended destination. The default gateways are used when the host doesn't know about the destination's network i.e. the network in which the destination is present or when the route information is not available for any destination then it goes to the default gateway so that it can identify in which network the destination is and can forward the data through that route. The default gateway is an important device for the data forwarding and routing of the data on the other network. It helps in the communication of one network computer with the other network computer.

Default gateway confiuration diagram

ISP / Cloud

Default gateway

LAN IP : 170.31.55.140

USE THE FOLLOWING IP ADDRESS

system

IP ADDRESS :   170.31.55.140
SUBNET MASK : 255.255.0.0
DEFAULT GATWAY : 170.31.55.140

Conclusion:

In conclusion, using a router as a gateway is a simple and effective way to connect multiple devices to the internet and enable them to communicate with each other. By following the steps outlined in this article, you can set up a router and configure it to act as a gateway for your devices. This will provide several benefits, including improved security, increased speed and reliability, and the ability to connect multiple devices to the internet.

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How to Find Your Default Gateway:

1. In Windows:

1. In Windows, we can get our default gateway with Command Prompt.

2. To access the command prompt click on start and search for "**CMD**" and open.
3. In the command prompt window type "**ipconfig**" command and press enter and you can see the Default Gateway in the information generated by the command with the machine's IP address listed.

2. In Linux:

- Open the terminal and use the command "**ip route | grep default** ". It will locate the default gateway.

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How to Find Your Default Gateway IP Address?

A default gateway is a node that enables a connection between networks in order to allow machines on other networks to communicate, In other words, the default gateway is an intermediate node between the local network and the internet. In this article, we will learn How to find the default gateway IP address of a machine. The IP address of the Defa