

PROTOCOL

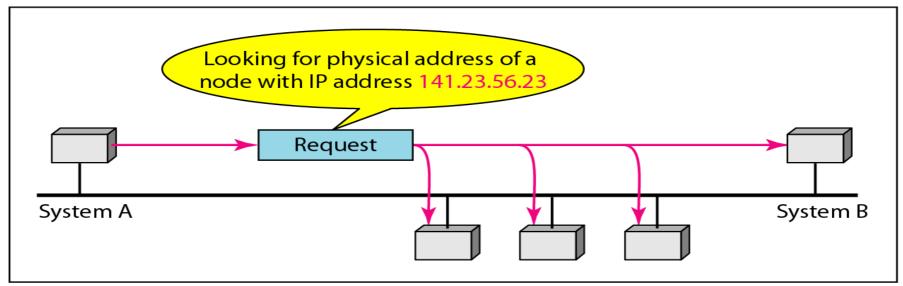


ARP AND RARP

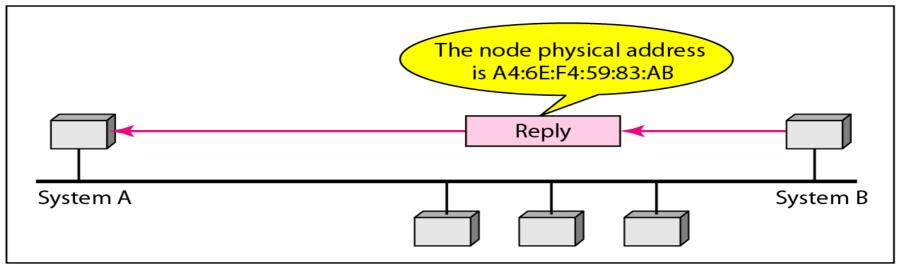
The basic difference between ARP and RARP is that

ARP when provided with the logical address of the receiver it obtains the physical address of the receiver whereas in

RARP when provided with the physical address of the host, it obtains the logical address of the host from the server.



a. ARP request is broadcast



b. ARP reply is unicast

| BASIS FOR COMPARISON | ARP | RARP |
|-------------------------|------------------------------------------------------------------|-------------------------------------------------------------------|
| Full Form | Address Resolution Protocol. | Reverse Address Resolution Protocol. |
| Basic | Retrieves the physical address of the receiver. | Retrieves the logical address for a computer from the server. |
| Mapping | ARP maps 32-bit logical (IP) address to 48-bit physical address. | RARP maps 48-bit physical address to 32-bit logical (IP) address. |



ICMP

ICMP or Internet Control Message Protocol is one of the major protocols of the TCP/IP.

ICMP is a mechanism used by the host, routers, and gateways to send error messages back to the sender.

As the IP does not provide any mechanism for error reporting and control, ICMP has been designed to compensate for these deficiencies of the IP.

However, it only reports the error and doesn't correct the error.



ICMP

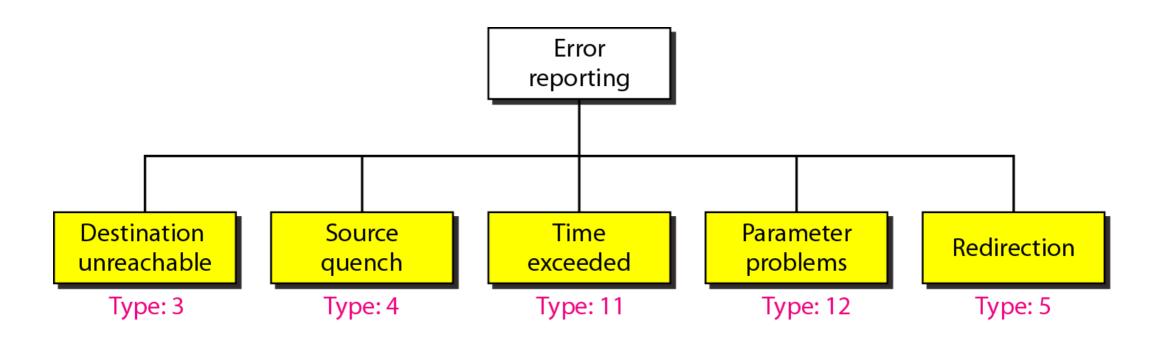
When you are not connected to the internet and search for any website then you get an error message like destination unreachable or time limit exceeded etc.

These messages are displayed through the ICMP protocol.

The IP protocol does not have any mechanism for error reporting and sending query messages. This problem is resolved by the ICMP protocol.



Error-reporting messages





IGMP

The IP protocol can be involved in two types of communication: unicasting and multicasting.

The Internet Group Management Protocol (IGMP) is one of the necessary protocols that is involved in multicasting.

Online streaming of videos and games generally uses the IGMP protocol for more efficient use of the resources. I