HOW THE WEB WORKS

Indian Institute of Technology Kanpur

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Navpreet Singh

IIT Kanpur
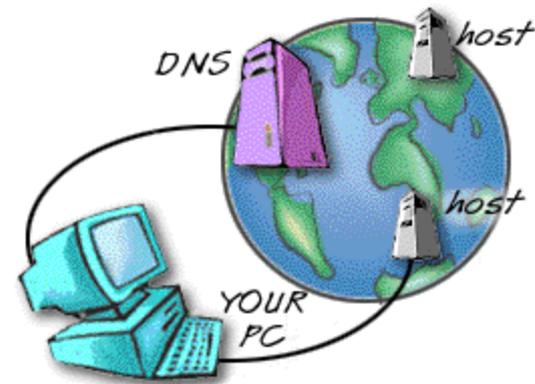
How Web Works?

- Let's say you want to visit the google website.

- First you enter the address or URL of the website in your web browser.

- Then your browser requests the DNS Server to get the IP (Internet Protocol) address of the web server.

- Internet Protocol is the protocol used for data communication on the Internet.
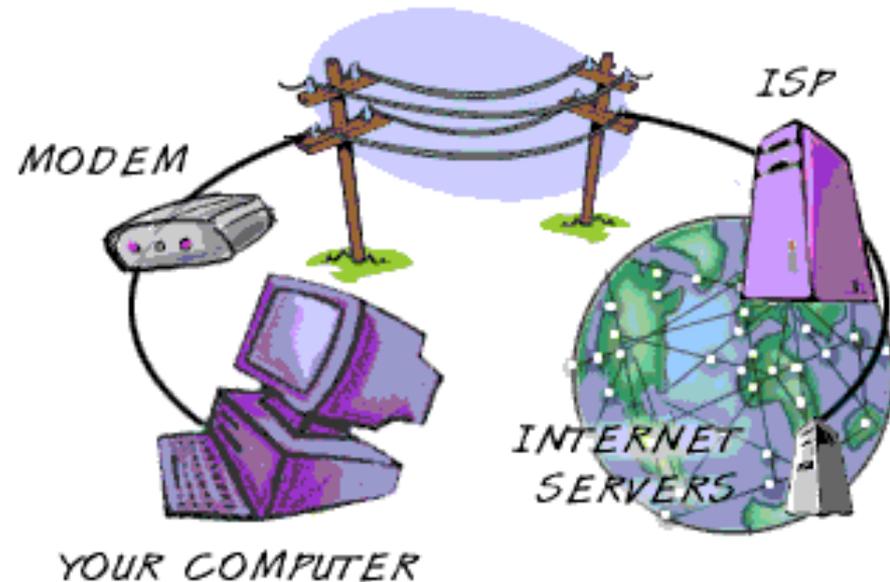
How Web Works?

- Every server on the Internet has a unique address called IP address through which it can be accessed over the Internet.

- IP address is a 32 bit number represented in dotted decimal notation. For example IP address of one of the servers hosting **www.google.com** is 173.194.36.20

- DNS (Domain Name Servers) maintain the mapping of name to IP address. Names are used by humans to easily identify websites and corresponding IP addresses are used by machines to connect to each other.
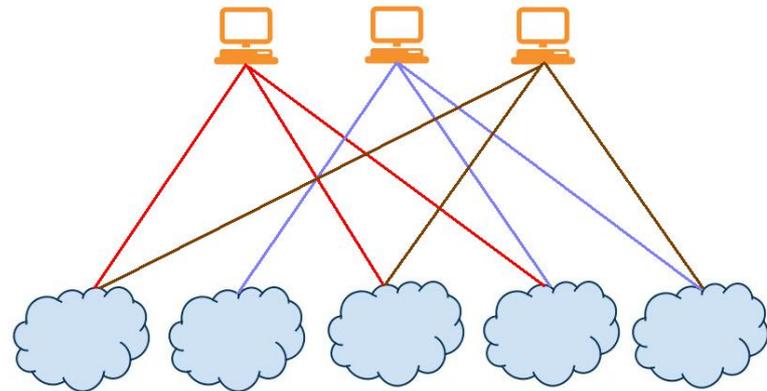
How Web Works?

- **Once the IP address of the web server has been identified, then your machine sends an HTTP request to the web server that hosts the google site.**

- **HTTP (Hyper Text Transfer Protocol) is the protocol used for communication between web servers and browsers.**

- **The server sends the data over the Internet to your computer.**

- **Your web browser interprets the data, displaying it on your computer screen.**

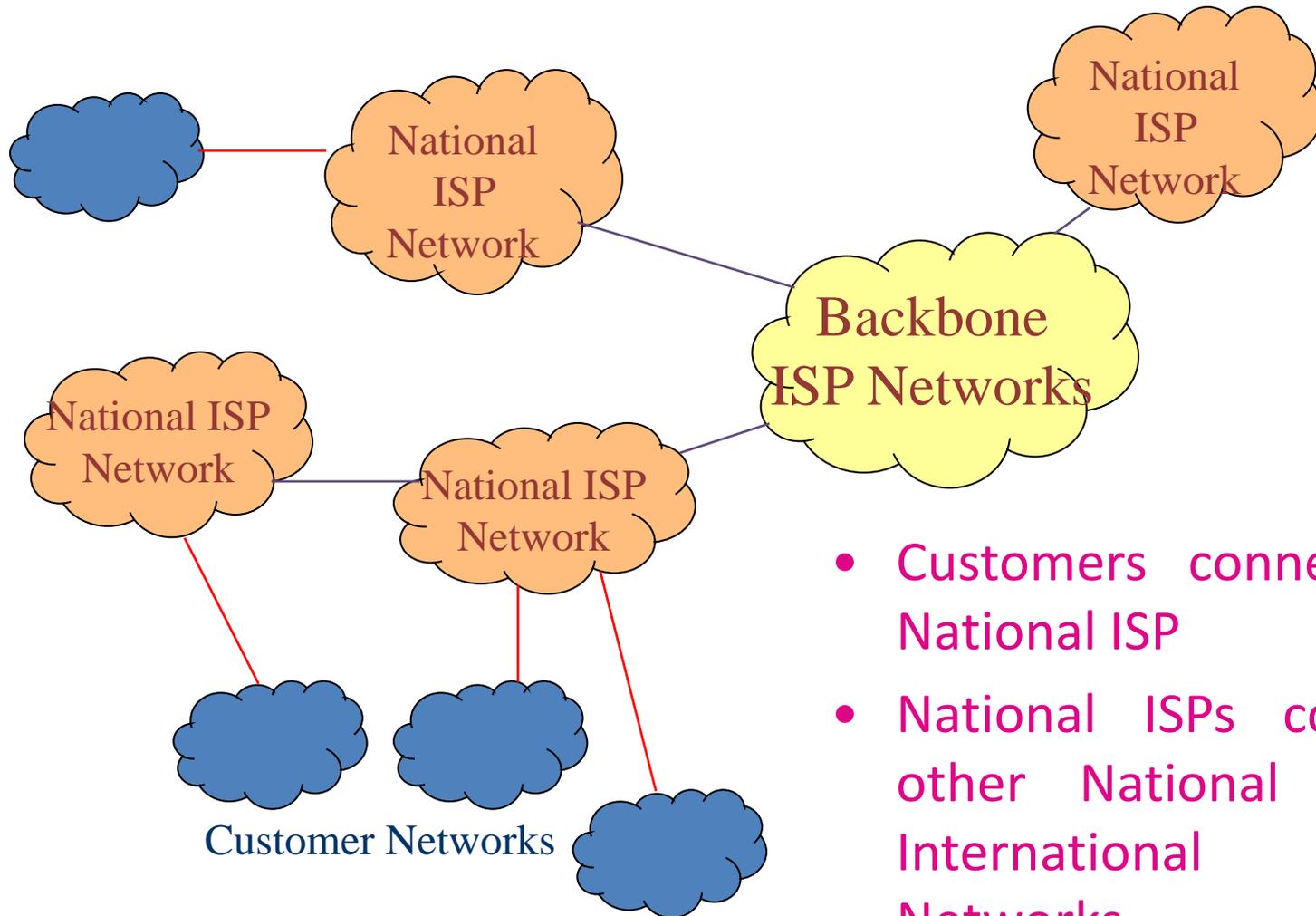MODEM
ISP
YOUR COMPUTER
INTERNET SERVERS

How Web Works?

- **For heavily visited websites (like google), DNS load balancing is used to distribute the load.**

- **Multiple geographically distributed servers host and serve the same content, also called as mirror servers.**

- **When the DNS query is done, the geographical location of the client is determined and IP address of the nearest server is provided.**

- **If www.google.com is accessed from India, the request is automatically directed to www.google.co.in, which is the mirror of google website, hosted in India.**

Internet Architecture

National ISP Network

National ISP Network

National ISP Network

National ISP Network

National ISP Network

Backbone ISP Networks

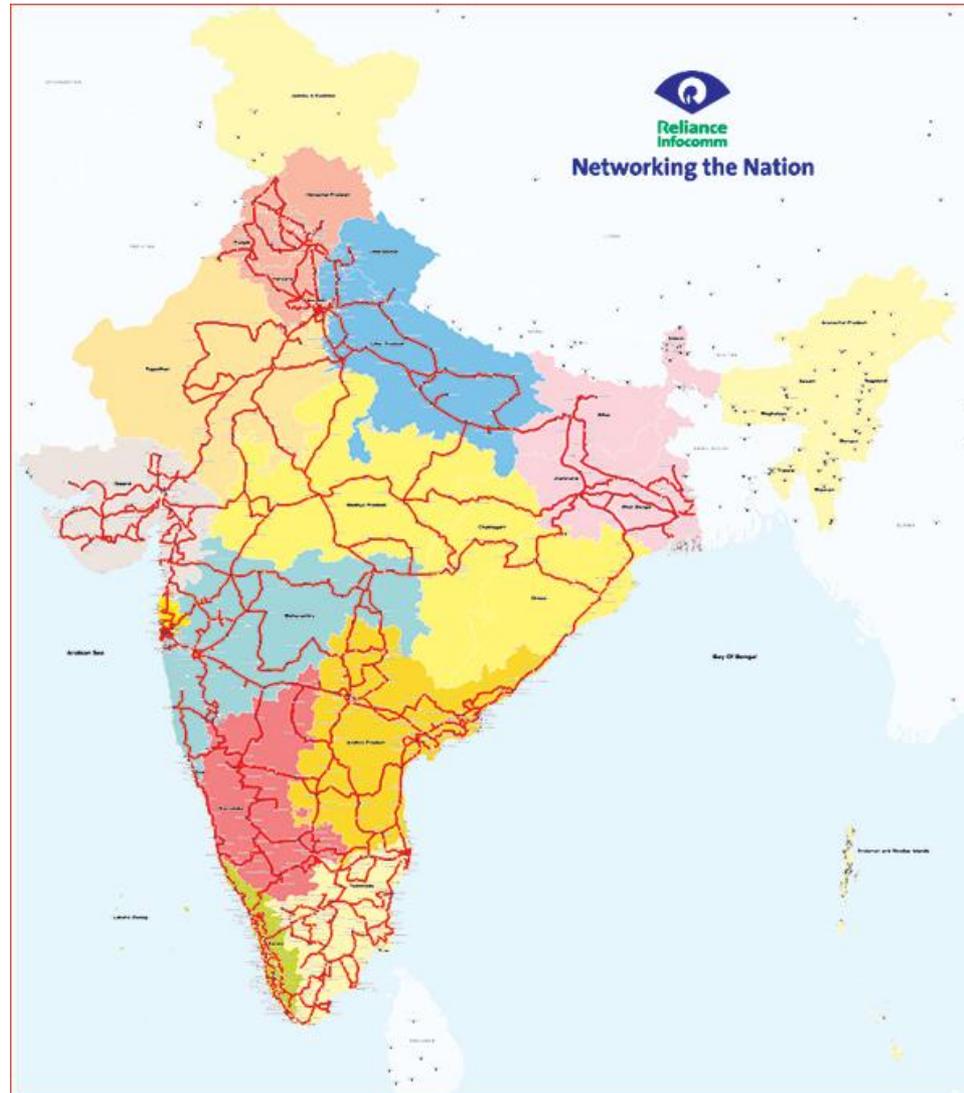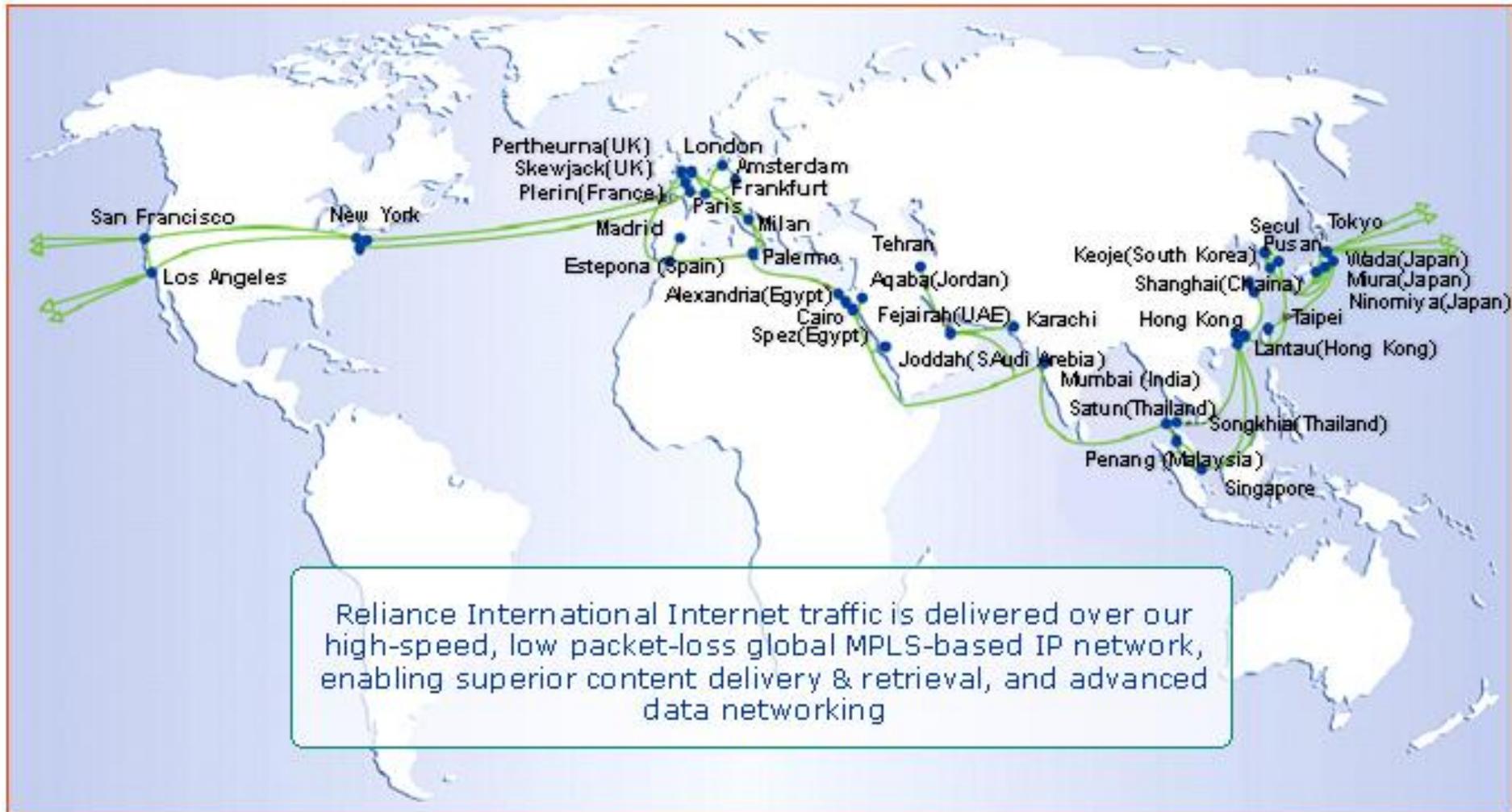Customer Networks

- Customers connect to an National ISP
- National ISPs connect to other National ISPs and International Backbone Networks

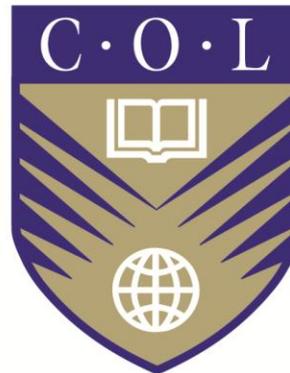# National ISP Networks: Reliance

International ISP Networks: Flag Telecom (Reliance)

Reliance International Internet traffic is delivered over our high-speed, low packet-loss global MPLS-based IP network, enabling superior content delivery & retrieval, and advanced data networking

THANK YOU