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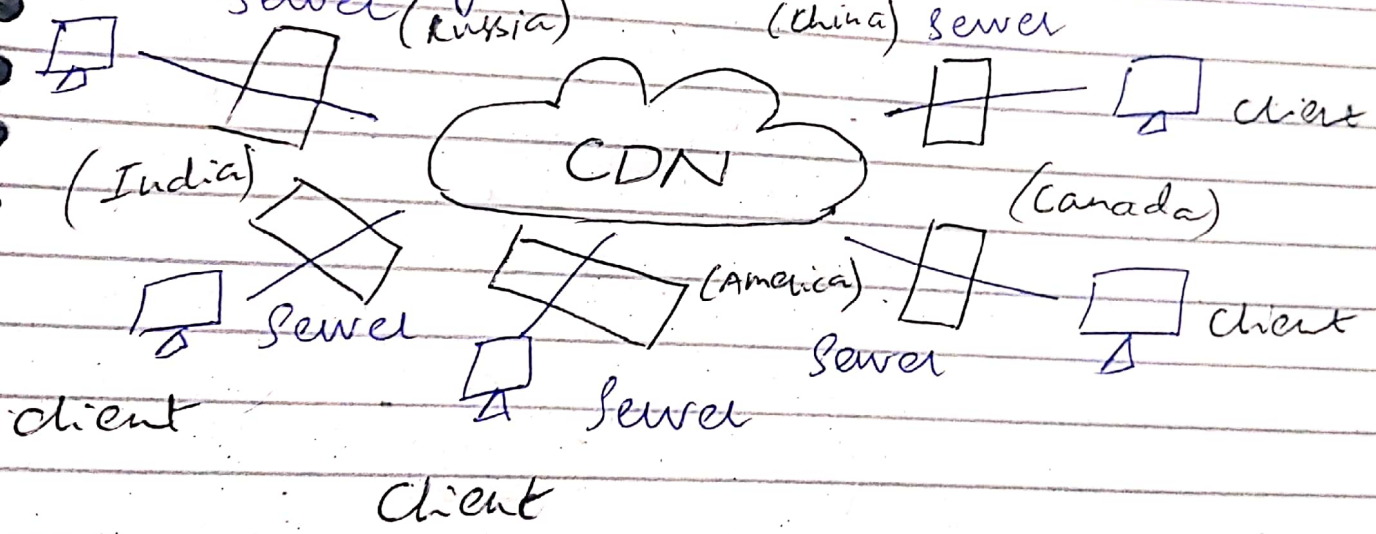
Parallel Distributed Computing B

=> Content Delievery Network (CDN)

A content delievery network (CDN) is a group of geographically distributed servers that speeds up the delievery of web content by bringing it closer to where users are.

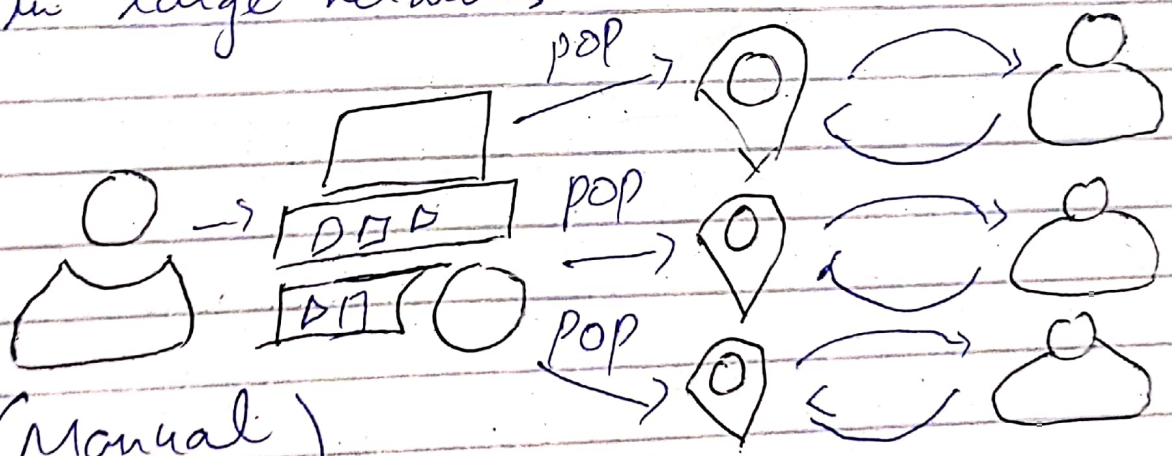


=> Example:- If you were in Newyork and wanted to view the website of your favourite store in London that's hosted on a sewer in UK, you would experience low/slow content load times if the request had to travel all the way across the Atlantic Ocean. To remedy this, CDN would stored a cache version of London website content

in multiple geographical locations around the world, also called PoPs (Points of Presence). These pops contain their own catching servers & are responsible for delivering content that close to where you are located in New York.
ie Netflix used CDN.

=> CDN Architecture:-

- Origin servers are the source of your data.
- Control nodes are where management, routing, monitoring and security tools reside.
- Delivery nodes are key to content delivery.
- Storage nodes are add efficiency to the CDN in large networks.



(Manual upload)

A pushZone on the other hand, places uploaded content on various storage servers across the globe and pushes content to POP upon user request.

=> Advantages of CDN :-

- Increased Security.
- Improved SEO.
- Downtime protection and reliability.

=> The main advantage and object of CDN is to deliever content at the top speed to users in different geographical locations and that is done by a process of replications. CDN provides web content services by duplicating content from other servers and directing it to users from the nearest data center.

- Lower latency.