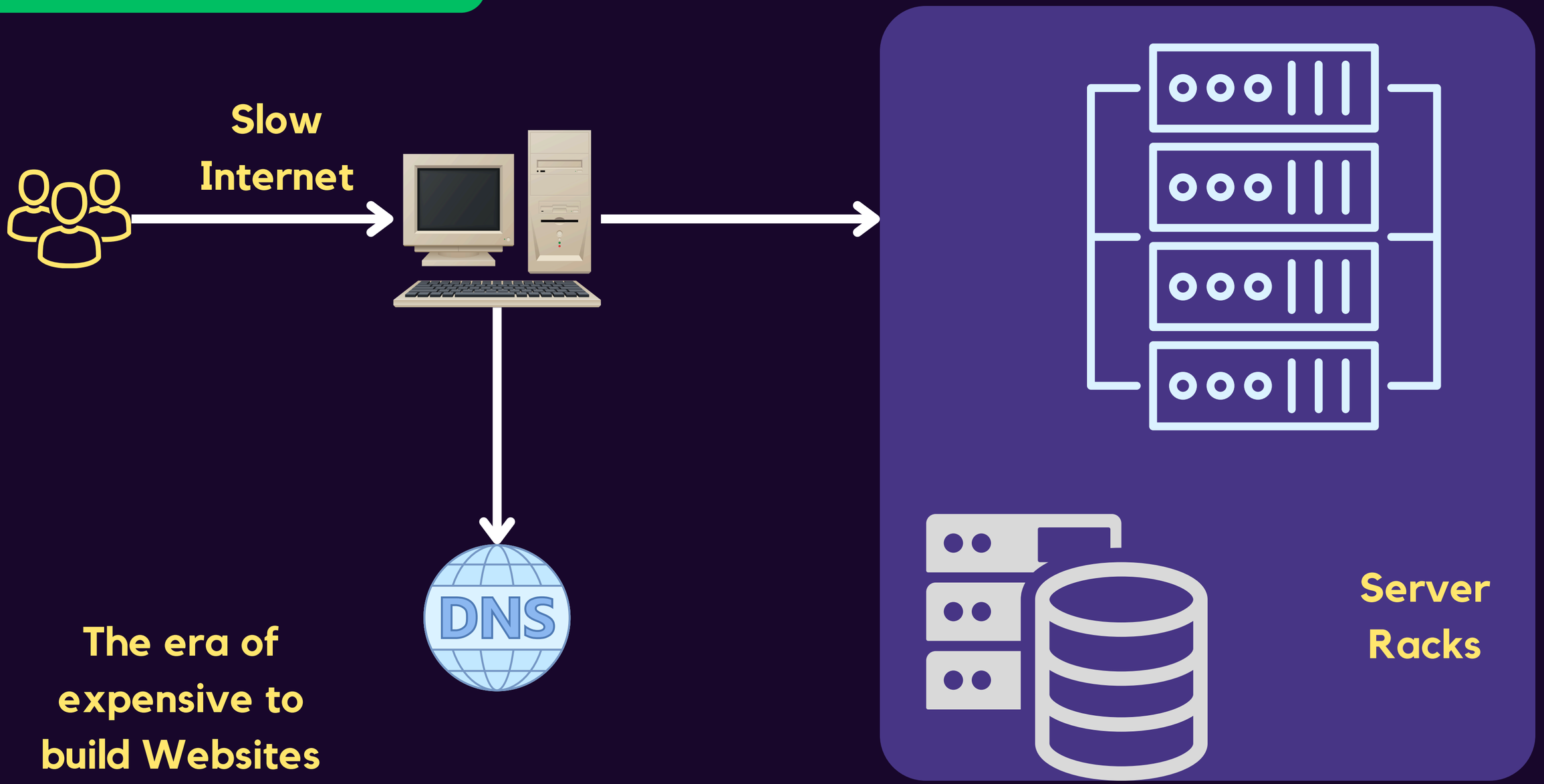
MINDSONAI

INTRODUCTION TO CLOUD

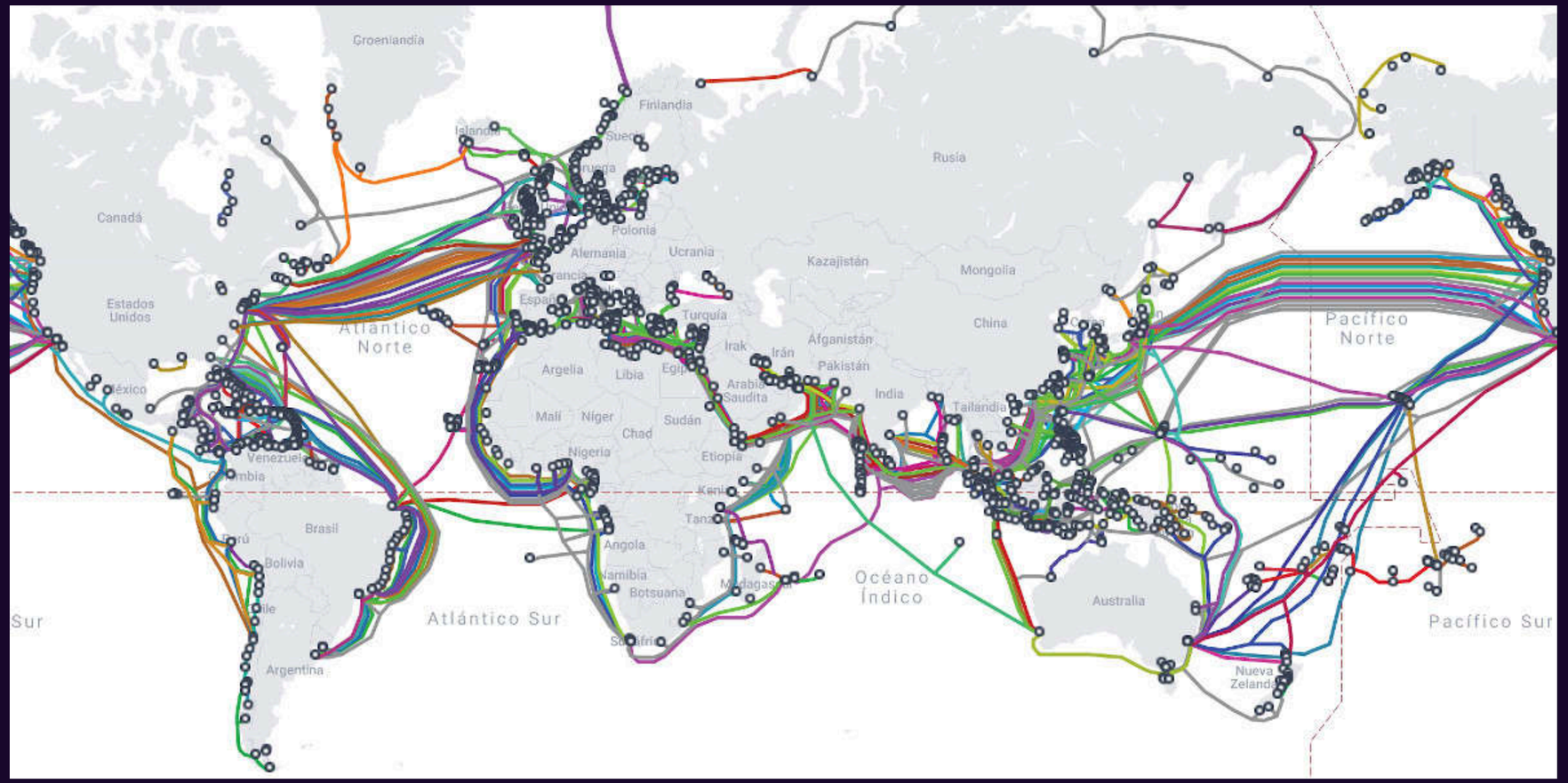
rishabh.io

Pre-Cloud Times



The era of expensive to build Websites

Then Internet became Widespread



And that led to Cloud

Cloud in simple terms
means renting compute,
storage, n/w etc

Benefits of Cloud to small players

1. No upfront hardware cost.
2. Ability to scale up or down (as per the need)
3. No min-use commitments
4. Flexibility to choose the regions
5. Pay for only what you use

Benefits of Cloud to big players

1. Reduction in resource wastage
2. New (Profitable) Business Model
3. Multiple data centers -> Multiple edge locations
4. Cost reduction because of the Flexibility of cloud

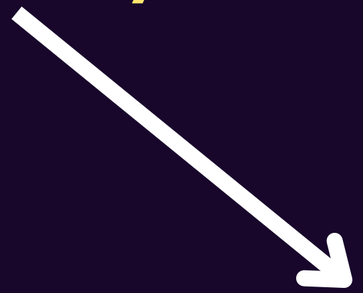
Azure Cloud Demo. Running a static page via cloud.

Connecting to the Server via SSH

```
ssh -i ./key.pem <username>@ip_addr
```

Installing a Server for Static Content

1. sudo apt update
2. sudo apt install nginx
3. sudo systemctl start nginx
4. sudo systemctl enable nginx
5. sudo systemctl status nginx



Stands for "superuser do", used to run commands with elevated privileges

Securing the data flow with TLS

1. sudo apt update
2. sudo apt install certbot python3-certbot-nginx
3. sudo certbot --nginx -d learndsalgo.com -d www.learndsalgo.com
4. sudo certbot renew --dry-run (optional)

Reference:
https://www.digitalocean.com/community/tutorials/how-to-install-nginx-on-ubuntu-20-04

Copy Code / Data to Server

1. scp -i ~/.ssh/id_rsa /home/<file>.ext
   user_name@server_addr:/home/john/files/

Demo Connecting Domain Name

Demo: Connecting domain name
to a cloud hosted server.

Task-1:

Deploy a model to Cloud making it accessible over a Restful API.

Connect it to a Domain Name.

Make all end-points accessible via Postman.

Task-2: Install docker, docker-compose on your local machine.