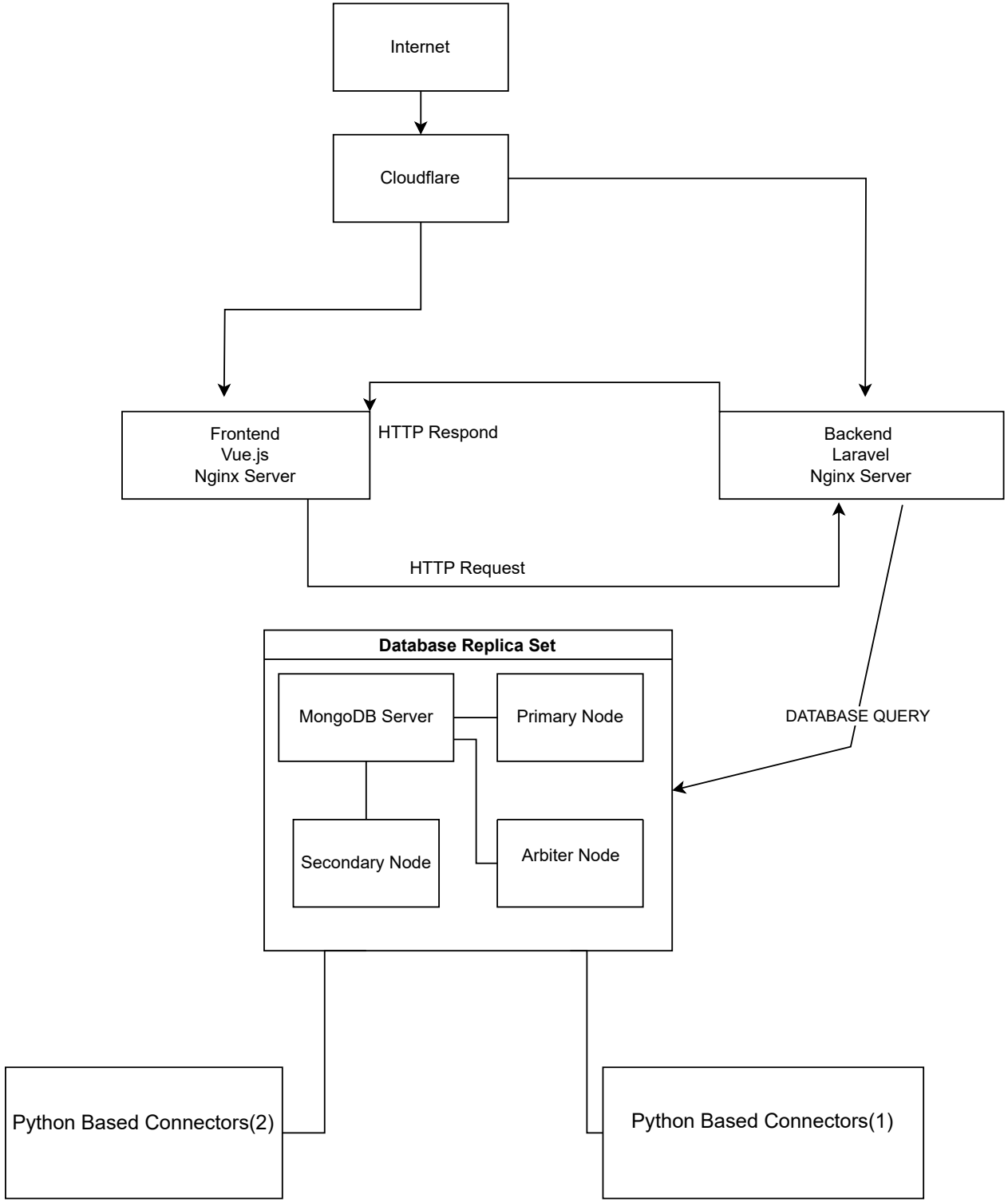


Internet

Cloudflare & Load bal

- **WHY**
- **Cloudflare as the Entry Point:** All i passes through Cloudflare, where secu applied.
- **Load Balancer:** After passing through routed to the load balancer.
- **Internal Network:** The load balancer th to the appropriate backend services (f database).

Load Balanc

Server A

Server B

Load Balancer: The load balancer receives incoming tra across multiple backend servers according to a specif algorithm.

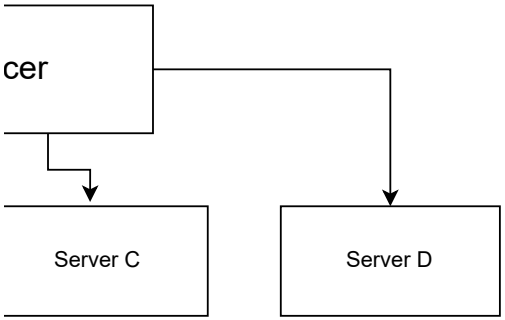
Client to Load Balancer: Clients (users) send HTTP/HTT application's public IP or domain name, which resolves to

lancer

ncoming traffic first
rity measures are

Cloudflare, traffic is

ien distributes traffic
frontend, backend,



affic and distributes it
fic load balancing

TPS requests to the
o the load balancer.

Resource Management

Specifying Resources for Servers

1. Frontend Server (Vue.js)

- **CPU:** 8 vCPUs
- **Memory:** 16 GB RAM
- **Storage:** 256 GB SSD

2. Backend Server (Laravel)

- **CPU:** 12 vCPUs
- **Memory:** 32 GB RAM
- **Storage:** 512 GB SSD

3. Database Server (MongoDB)

- **CPU:** 16 vCPUs
- **Memory:** 64 GB RAM
- **Storage:** 2 TB SSD (scalable based on data growth)

4. Python Connectors Server

- **CPU:** 8 vCPUs
- **Memory:** 16 GB RAM
- **Storage:** 512 GB SSD

This is a rough idea how much we can get cost per server

	AMD Ryzen™ 7 PRO 8700GE
CPU	8 cores / 16 threads @ 3.65 GHz
Generation:	Octa-Core Phoenix 1 (Zen4)
RAM	64 GB DDR5 ECC
Drives	min. 2 x 512 GB NVMe SSD (Gen4) Up to 2 x optional (at additional cost) NVMe, SATA and HDD available
Locations	
Information	IPv4

starting from

€54.74 max. per month

€0.0877 per hour

setup fee €46.4