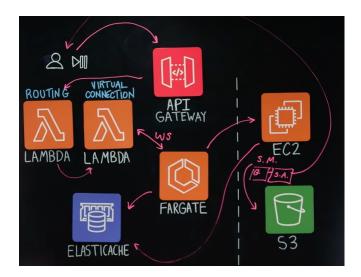
Company Name: PureWeb

Video Link: https://www.youtube.com/watch?v=hrhBOOrR5v0&list=PLhr1KZpdzukdeX8mQ2gO73bg6UKQHYsHb&index=9

Solution: PureWeb: Building a Global 3D Streaming Platform For Limitless Experiences

PureWeb intelligently routes **streaming requests** from any device, anywhere on the planet, with decisioning based **on network latency, and system preference and load**. PureWeb's architecture leverages both **serverless** and **provisioned compute** to deliver 3D streaming for **limitless experiences**.



Users clicks on the launch or play button in the device which direct to REST API gateway which includes the details about the game/programs/model instructions. Lambda triggers to the regional routing based on network latency, and system preference and load. Virtual connection Lambda connected to FARGATE cluster (Brain), a web-socket connection which allocated the EC2 instances for the computational work. EC2 are registered in Elastic-cache(In-memory cache) which notify the fargate which are available. Service Manger and couple of microservices in between the instance running. SM maintain the running of EC2 instances and register to elastic-cache. Service Manager bring the game/Models from S3 to EC2 for processing as per the request. Another microservices brings the content to the users.

AWS SERVICES mentioned:

- API GATEWAY: Create, maintain, and secure APIs at any scale. https://aws.amazon.com/api-gateway/
- AWS Lambda: Run code without thinking about servers or clusters. https://aws.amazon.com/lambda/
- Fargate: Serverless compute for containers. https://aws.amazon.com/fargate/
- **ElastiCache**: Unlock microsecond latency and scale with in-memory caching. https://aws.amazon.com/elasticache/
- Amazon S3: Object storage built to retrieve any amount of data from anywhere. https://aws.amazon.com/s3/
- **Amazon EC2:** Secure and resizable compute capacity to support virtually any workload. https://aws.amazon.com/pm/ec2/