Amazon CloudFront

What?
- Amazon CloudFront is a web service that speeds up distribution of your static and dynamic web content to your users.
- It reduces latency by delivering data through 310+ Points of Presence (300+ Edge locations and 13 regional mid-tier caches) with automated network mapping and intelligent routing.

Why?
- Compared to self-hosting, Amazon CloudFront spares you from the expense and complexity of operating a network of cache servers in multiple sites across the internet. You also benefit from tight integration with other Amazon Web Services.
- It also eliminates the need to over-provision capacity in order to serve potential spikes in traffic.

When?
- You want to accelerate content delivery and APIs, stream live and on-demand video, reach viewers across the globe in milliseconds with built-in data compression, edge compute capabilities, and field-level encryption.
- You want to customize the code you run at the AWS content delivery network (CDN) edge using Lambda@Edge.

Where?
- Amazon CloudFront is a global service. It serves content from an origin. An origin is the location where content is stored, and from which CloudFront gets content to serve to viewers.
- An origin can be Amazon S3 bucket, ELB, AWS Media Services or any HTTP host (including on premises server).

Who?
- You create a CloudFront distribution by specifying an origin and details about how to track and manage content delivery by configuring caching policy, security and logging.

How?
- When a user requests content that you are serving with CloudFront, the request is routed to the edge location that provides the lowest latency (time delay), so that content is delivered with the best possible performance. If the content is not in that edge location, CloudFront retrieves it from an origin that you have defined.

How much?
- For on-demand pricing, CloudFront charges traffic served via data transfers out from edge locations, along with HTTP or HTTPS requests. There are no transfer fees for origin fetches from any AWS origin.
- For commitment based pricing use CloudFront Savings Bundle and Custom Pricing.