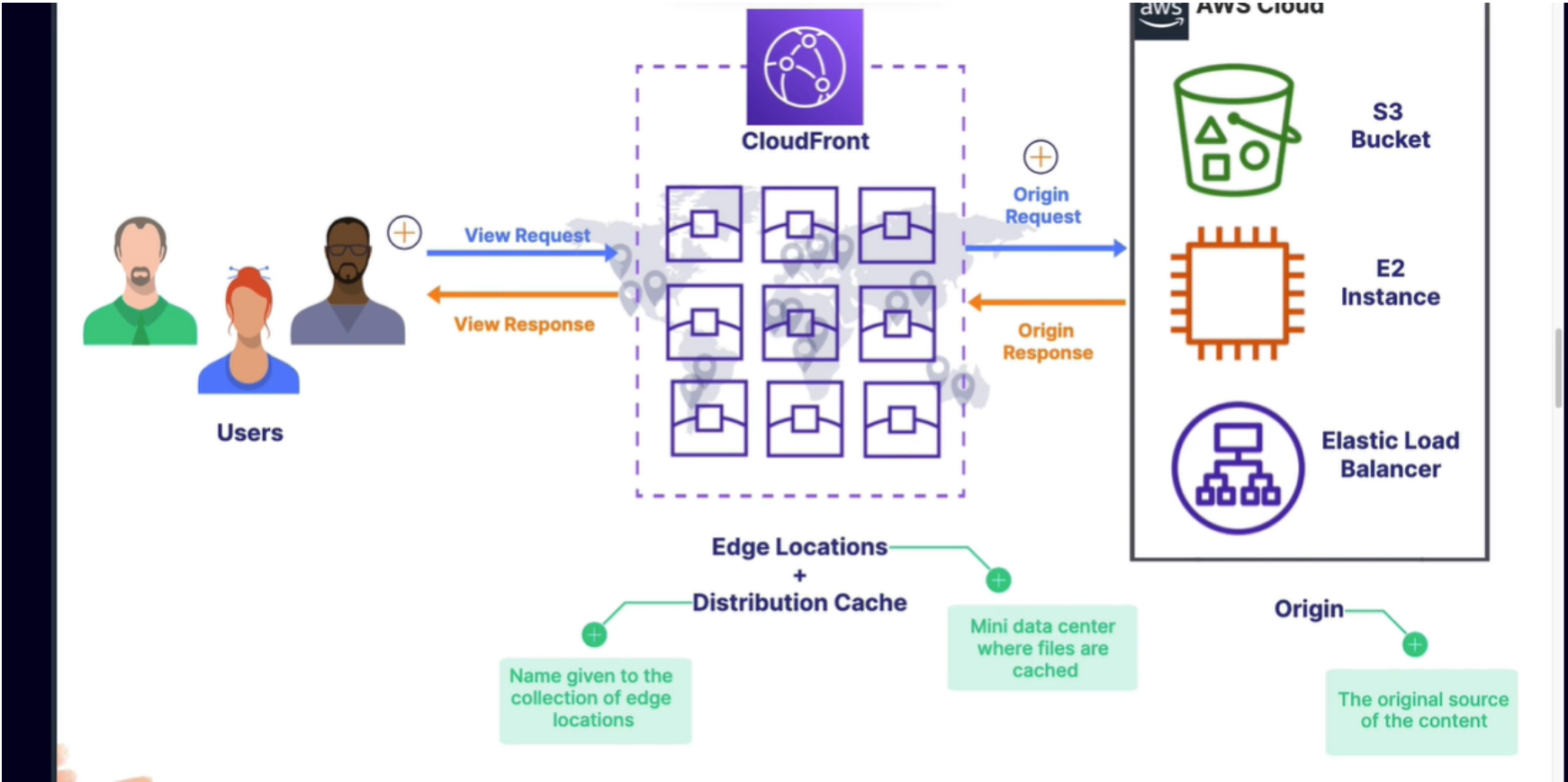


Understanding content delivery

Questions	Notes
the bigger picture	<ul style="list-style-type: none">• what's content dilevry: A cdn is a mechanism to deliver content quickly and efficiently based on Geographic location• Latency; simply means the time it takes to respond to a request
Amazon CloudFront	<ul style="list-style-type: none">• Cloudfront is a CDN that delivers data and apps globally with low latency• Makes content available globally or restricts it based on location• speeds up delivery of static dynamic web content• uses edge locations to cache content• if the content is already in the edge location , CloudFront delivers it immediately , if not Cloudfront retrieves the files from the origin  <p>The diagram illustrates the Amazon CloudFront architecture. On the left, three user icons are labeled 'Users'. A blue arrow labeled 'View Request' points from the users to a central dashed box labeled 'CloudFront'. Inside this box is a grid of nine server icons representing 'Edge Locations + Distribution Cache'. A green callout box points to this grid with the text 'Name given to the collection of edge locations'. A blue arrow labeled 'Origin Request' points from the CloudFront box to a box on the right labeled 'AWS Cloud'. Inside the AWS Cloud box are three components: 'S3 Bucket' (represented by a bucket icon), 'E2 Instance' (represented by a chip icon), and 'Elastic Load Balancer' (represented by a load balancer icon). A green callout box points to this entire AWS Cloud box with the text 'Origin'. An orange arrow labeled 'Origin Response' points from the AWS Cloud box back to the CloudFront box. A green callout box points to this arrow with the text 'Mini data center where files are cached'. Finally, an orange arrow labeled 'View Response' points from the CloudFront box back to the users.</p> <ul style="list-style-type: none">• cloudFront in the real world:<ul style="list-style-type: none">◦ s3 static websites : is often used with s3 to deploy content globally◦ prevent attacks: Cloudfront can stop certain web attacks like DDOS.◦ IP-address blocking: GEO-restriction prevents users in certain countries from accessing content
Global Accelerator	<ul style="list-style-type: none">• Global accelerator sends your users through the aws global network when accessing your content , speeding up delivery• Improves latency and availability of single region applications• sends traffic through the aws global network infrastructure• 60% performance boost• automatically re-routes traffic to healthy available regional endpoints
S3 Transfer accesleration	<ul style="list-style-type: none">• fast transfer of files over long distances• uses CloudFront's globally distributed edge locations• Customers the world can upload to a central bucket

Résumé

- CloudFront: don't forget Cloudfront allows for global distribution of content
- Global accelerator: remember Global accelerator provides low latency
- Security features: Don't forget cloudfront has security features like DDOS protection and geo-restriction
- S3 transfer accelaration: remember S3 transfer acceleration provides fast transfer of files over long distances