

# Leveraginig the aws global infrastructure

Questions	Notes
region	<ul style="list-style-type: none"><li>• is a physical location</li><li>• how aws group regions?: aws logically groups its regions into geographic locations</li><li>• you want to select a region that is closest to your users it improves the user exprience they will see faster downloads and response times</li><li>• fully independent ans isolated: if one region is impacted , the others will not be</li><li>• ressource and service specific: regions are isolated, and resources aren't automatically replicated across them</li></ul>
Availabilty Zones	<ul style="list-style-type: none"><li>• AZs consist of one or more physically separated data centers , each with redundant power , networking and connectivity , housed in separate facilities</li><li>• did you know AZs are connected among themselves in a single region?</li></ul> <ol style="list-style-type: none"><li>1. physically sparated</li><li>2. connecte dthrough low-latency links</li><li>3. fault tolerance</li><li>4. allows for high availability</li></ol>
Edge location	<ul style="list-style-type: none"><li>• Edge location cache content for last delivery to you users</li><li>• like mini data center , but it's not used to launch ressources like EC2 instances</li><li>• this is made possible through Cloudfront</li><li>• Edge locations actually reduce latency</li><li>• speed up the delivery of your applications</li></ul>
what's latency?	<ul style="list-style-type: none"><li>• latency is the time that passes between a user request and the resulting response</li><li>• low latency is always a good thing because it means that your website is loading fatser</li></ul>

## Résumé

- multi-AZ deployments provide high Availabilty
- an AZ has multiple data centers
- A region global and has more AZs
- Edge locations ensure low latency by placing content closer to users