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**ROLL NO – 7**

**TOPIC – AZURE CDN**

**-What is Azure Content Delivery Network (Azure CDN)?**

**-** Azure Content Delivery Network (CDN) is CDN service provided by Azure Cloud Platform that enables in storing and accessing data on different content servers and locations – used by online or cloud services. Azure CDN helps in providing better bandwidth and quick delivery of data by placing content delivery or storage servers near to users ( in different geographical locations)

**- How Azure Content Delivery is used?**

- The Azure Content Delivery Network offers developers a global solution for delivering high-bandwidth content by caching the content on different locations.

* The caching capability by Azure helps in ----

1. Better performance and user experience for end-users who are far from the destination content source or where there are many intermediary nodes in between to reach the content.
2. Ability to scale to handle instantaneous high load and demand
3. Caching content from publicly available Azure storage blobs
4. Caching web content, images, scripts, and other website content from CDN
5. Enables in caching objects to the CDN that are provided by an Azure cloud service
6. Cache content based on specific query strings

**-What to monitor in Azure CDN for performance?**

* Some of the key metrics & data to look for when evaluating CDN for performance includes-----

1. Connect time – Ensure that CDN has the best network connectivity with minimal latency and packet loss, even under peak usage
2. Wait time – The time it takes to deliver the content from the CDN to the requesting node the less the better.
3. Throughput – Ensure that the overall throughput of the CDN is higher than the origin
4. Caching – Monitor overall Cache Hits and Misses

* **Features of Azure CDN:**

1. *Global Distribution:* Azure CDN's server network is spread across the world, allowing content to be delivered globally and from the location closest to the local users.
2. *High Performance:* It caches content, reducing the load time of websites and applications, thereby improving the user experience.
3. *Security:* Azure CDN ensures secure content delivery with HTTPS support and can be integrated with other Azure security services.
4. *Scalability:* Azure CDN can handle large-scale traffic, making it suitable for both small and large businesses.
5. *Seamless Integration:* It can be easily integrated with other Azure services, providing a comprehensive solution.

**Use Cases:**

1. Improving Website and Application Performance: Enhancing user experience through fast content delivery.
2. Video Streaming: Streaming video content without interruptions and in high quality.
3. Software and File Distribution: Distributing software updates, games, and other large files globally.

