Lecture-55
Google's Network Architecture

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You will now review Google's Network architecture what your private cloud is a comprehensive set of networking capabilities and infrastructure that is managed by Google. With virtual private cloud you can connect your GCP resources in a virtual private cloud and isolate them from each other for purposes of security compliance and development versus test versus production environments. Cloud load balancing provides high-performance scalable load balancing for GCP to ensure consistent performance for user.

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A content delivery network serves content to users with high availability and high performance usually by storing files closer to the user. With cloud CDN Google's global network provides low latency, low cost content delivery.

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Cloud interconnect lets you connect your own infrastructure to Google's Network edge with enterprise grade connections. Connections are offered by our partner network service providers and may offer higher service levels than standard internet connections.

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Cloud DNS or domain name system translates requests for domain names into IP addresses. Google provides the infrastructure to publish specific domain names in high-volume DNS service suitable for production applications.

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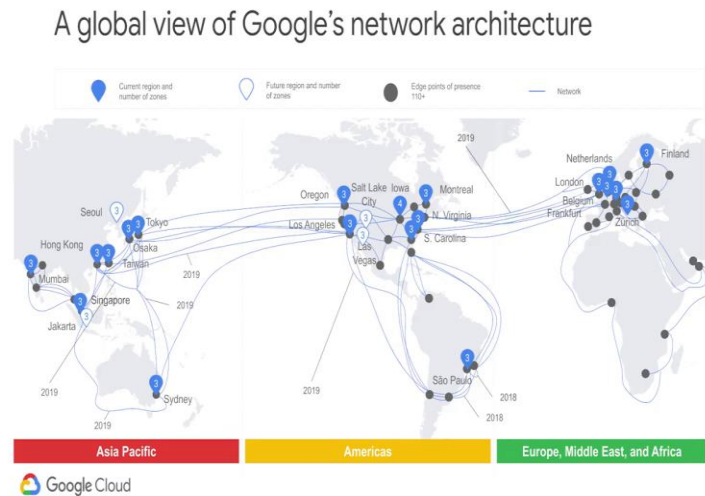
This map represents the Google cloud platform at a high level. GCP consists of regions represented by the markers in blue together with proposed future regions in white. A region is a specific geographical location where you can run your resources. The number on each region represents the zones within that region. Points of presence or pops are represented by the grey dots the pops are where the Google network is connected to the rest of the internet.

By operating an extensive global network of interconnection points GCP can bring its traffic close to its peers thereby reducing costs and providing users with a better experience. Google's global private network is represented by the blue lines the network connects regions and pops and is composed of hundreds of thousands of miles of fiber-optic and several submarine cable investments.

The cables that have a year next to it are our latest investments. The last component that makes up the architecture is Google's services themselves.