

Google aims to deliver its services with high performance, high reliability, and low latency for users, in a manner that respects open internet principles.

We've invested in network infrastructure that's aligned with this goal and that allows us to work with network operators to exchange traffic efficiently and cost-effectively.

Google's network infrastructure has three distinct elements:

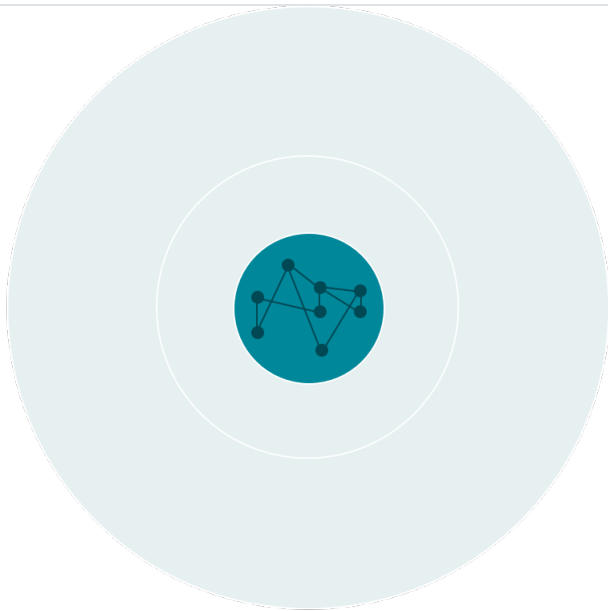
Data Centers

Edge Points of Presence (POPs)

Edge Nodes (Google Global Cache, or GGC)

Data Centers



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## Data Centers

Google operates data centers in the Americas, Europe and Asia that we use for computation and backend storage.

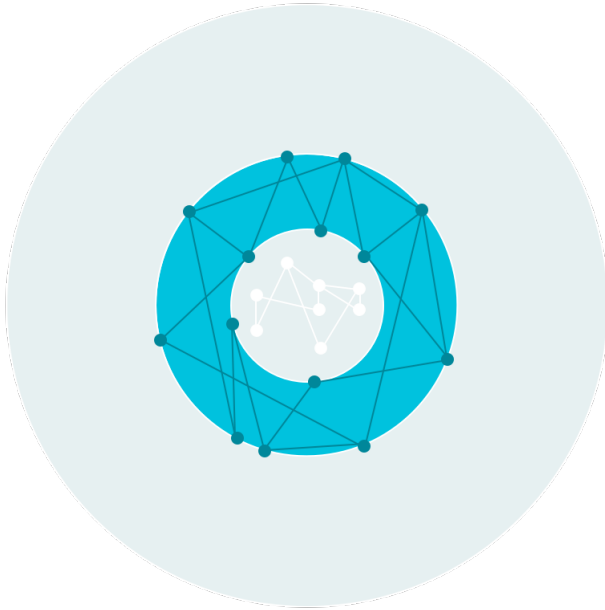
Our data centers are the heart of Google content and services.

Google has built a large, specialized data network to link all of its data centers together so that content can be replicated across multiple sites for resilience, and services can be delivered closest to the end user.

More information on our [data centers](#).

More information on our [Google Cloud Platform regions](#).



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## Edge Points of Presence (POPs)

Our edge POPs are where we connect Google's network to the rest of the internet via peering. We're present on over 90 internet exchanges and at over 100 interconnection facilities around the world.

Google operates a large, global meshed network that connects our edge PoPs to our data centers.

By operating an extensive global network of interconnection points we can bring Google traffic closer to our peers, thereby reducing their costs and providing users with a better experience.

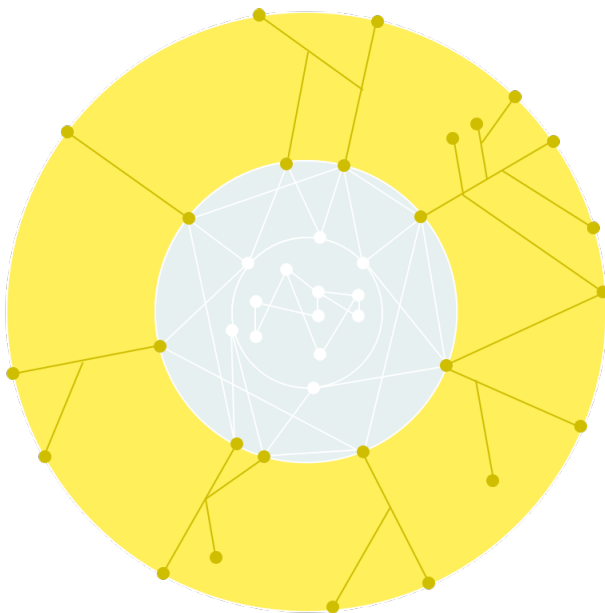
[See our record in peeringdb.com](https://peeringdb.com)





Map of metros where at least one edge POP is present.

↑  
Edge POPs



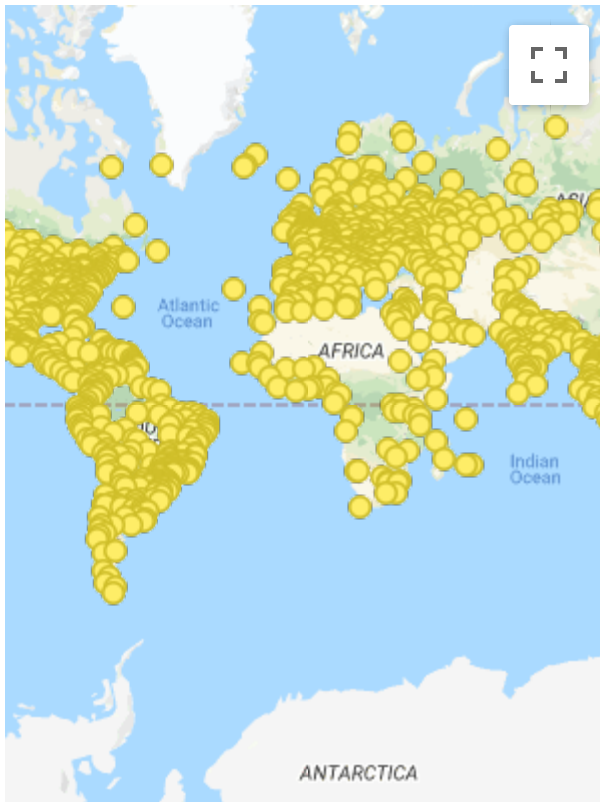
## Edge Nodes (Google Global Cache, or GGC)

Our edge nodes represent the tier of Google's infrastructure closest to our users. With our edge nodes, network operators and internet service providers deploy Google-supplied servers inside their network.

Static content that's very popular with the local host's user base, including YouTube and Google Play, is temporarily cached on edge nodes. Google's traffic management systems direct user requests to an edge node that provides the best experience.

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for the end user.



Map of metros where at least one edge node (GEC) is present.



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## Lean more about how to connect with Google

Edge network options