Some workloads running in Google Cloud require low latency between their VM instances in a specified region and the Dedicated Interconnect colocation facility you choose. If this is true for your workloads, you can select a low-latency (< 5 milliseconds) colocation facility location from the Locations table (#locations-table) in this document.

The pricing for low-latency locations is the same as for all other locations.

If your workloads don't require low-latency connectivity, you can use any of our <u>colocation facilities</u> <u>locations</u> (/interconnect/docs/concepts/colocation-facilities).

For Dedicated Interconnect your network must physically meet Google's network in a supported colocation facility, also known as an interconnect location), where a vendor, the colocation facility provider, provisions a circuit between your network and a Google Edge Point of Presence. For more information, see the <u>Cloud Interconnect Overview</u> (/interconnect/docs/concepts/dedicated-overview).

The **Region served** as listed in the table below indicates the regions in which you can create <u>VLAN</u> <u>attachments</u> (/interconnect/docs/concepts/dedicated-overview#elements), which affects latency and egress <u>costs</u> (/interconnect/pricing). For example, if you have VM instances in region us-east4 (Virginia), you might create a dedicated connection in Ashburn and then create an interconnect attachment (VLAN) in us-east4. That way, your traffic doesn't have to travel far to move between your VM instances and the dedicated connection, resulting in lower latency than, for example, creating a dedicated connection and an interconnect attachment in Europe.

Also, it's more cost effective to create interconnect attachments in the same regions as your VM instances because you don't have to pay inter-region egress costs when VM instances send traffic to your on-premises network.

- <u>Network edge locations</u> (/vpc/docs/edge-locations) allow you to peer with Google Cloud and connect to Google Cloud services. Peering does not require Cloud Interconnect.
- <u>Cloud CDN locations</u> (/cdn/docs/locations) use Google's globally distributed edge points of presence to cache HTTP(S) load balanced content close to your users. Caching content at the

edges of Google's network provides faster delivery of content to your users while reducing serving costs.

The following table lists low-latency locations where you can create dedicated connections. The locations are organized by the GCP regions served, <u>metropolitan area</u> (/interconnect/docs/concepts/terminology#metro), and then by <u>metropolitan availability zone</u>

(/interconnect/docs/concepts/terminology#metro), and then by metropolitan availability zone (/interconnect/docs/concepts/terminology#metrozone). The name of each location indicates its metropolitan availability zone, such as the zone1 in iad-zone1-1.

You can also use the console or gcloud command-line tool to <u>list locations</u> (/interconnect/docs/how-to/dedicated/listing-locations).

For information about which service providers are in each colocation facility, contact the facility provider or view the er's website that's listed in PeeringDB.

Region served	Metropolitar area	Interconnect nlocation name with < 5 ms to region	Facility provider
• northamerica-northeast1 (Montréal)	Montreal	yul-zone1-1944	Cologix MTL3 (https://www.peeringdb.com/fac/1944)
	Montreal	yul-zone2-1944	Cologix MTL3 (https://www.peeringdb.com/fac/1944)
• us-east4 (Virginia)	Ashburn	iad-zone1-1	Equinix Ashburn (DC1-DC11) (https://www.peeringdb.com/fac/1)
	Ashburn	iad-zone2-1	Equinix Ashburn (DC1-DC11) (https://www.peeringdb.com/fac/1)
• us-west2 (Los Angeles)	Los Angeles	lax-zone1-8	Equinix Los Angeles (LA1) (https://www.peeringdb.com/fac/8)
	Los Angeles	lax-zone2-19	CoreSite - LA1 - One Wilshire (https://www.peeringdb.com/fac/19)
europe-west2 (UK)	London	lhr-zone1-47	Global Switch (London 2) (https://www.peeringdb.com/fac/47)
	London	lhr-zone2-47	Global Switch (London 2)

			(https://www.peeringdb.com/fac/47)
	London	lhr-zone1-832	Equinix London Slough (LD5-LD6) (https://www.peeringdb.com/fac/832)
	London	lhr-zone2-832	Equinix London Slough (LD5-LD6) (https://www.peeringdb.com/fac/832)
europe-west3 (Germany)	Frankfurt	fra-zone1-58	Interxion Frankfurt (https://www.peeringdb.com/fac/58)
	Frankfurt	fra-zone1-277	e-shelter Frankfurt (FRA1) (https://www.peeringdb.com/fac/277)
	Frankfurt	fra-zone1-683	Equinix Frankfurt West (FR4) (https://www.peeringdb.com/fac/683)
	Frankfurt	fra-zone2-58	Interxion Frankfurt (https://www.peeringdb.com/fac/58)
	Frankfurt	fra-zone2-277	e-shelter Frankfurt (FRA1) (https://www.peeringdb.com/fac/277
	Frankfurt	fra-zone2-683	Equinix Frankfurt West (FR4) (https://www.peeringdb.com/fac/683
europe-west4 (Netherlands)	Amsterdam	ams-zone1-1236	Equinix Amsterdam Schepenbergweg (AM5) (formerly Telecity AMS5) (https://www.peeringdb.com/fac/123
	Amsterdam	ams-zone2-1320	Equinix Amsterdam (AM3) (https://www.peeringdb.com/fac/132
europe-west6 (Zurich)	Zurich	zrh-zone1-81	Interxion Zurich / Glattbrugg (https://www.peeringdb.com/fac/81)
	Zurich	zrh-zone2-83	Equinix ZH2 (https://www.peeringdb.com/fac/83)
asia-east1 (Taiwan)	Taipei	tsa-zone1-456	Chief LY Building Taipei (https://www.peeringdb.com/fac/456
	Taipei	tsa-zone2-2886	CHT Taipei-Aikuo IDC (https://peeringdb.com/fac/5904)
asia-east2 (Hong Kong)	Hong Kong	hkg-zone1-225	MEGA-i (iAdvantage Hong Kong) (https://www.peeringdb.com/fac/225
	Hong Kong	hkg-zone2-1118	Equinix Hong Kong (HK2) (https://www.peeringdb.com/fac/111

asia-northeast1 (Japan)	Tokyo	nrt-zone1-599	ComSpace I (https://www.peeringdb.com/fac/599)
	Tokyo	nrt-zone1-452	Equinix Tokyo (TY2) (https://www.peeringdb.com/fac/452)
	Tokyo	nrt-zone2-452	Equinix Tokyo (TY2) (https://www.peeringdb.com/fac/452)
	Tokyo	nrt-zone1-738	AT TOKYO (https://www.peeringdb.com/fac/738)
	Tokyo	nrt-zone2-738	AT TOKYO (https://www.peeringdb.com/fac/738)
• asia-southeast1 (Singapore)	Singapore	sin-zone1-388	Global Switch Singapore (https://www.peeringdb.com/fac/388)
	Singapore	sin-zone2-2260	Equinix Singapore (SG3) (https://www.peeringdb.com/fac/2260)
• asia-south1 (Mumbai)	Mumbai	bom-zone1-2310	GPX Mumbai (https://www.peeringdb.com/fac/2310)
	Mumbai	bom-zone2-554	Tata Mumbai IDC (https://www.peeringdb.com/fac/554)
australia-southeast1 (Sydney)	Sydney	syd-zone1-1660	NEXTDC S1 (https://www.peeringdb.com/fac/1660)
	Sydney	syd-zone2-1605	Equinix Sydney (SY3) (https://www.peeringdb.com/fac/1605)