Talkdesk Global Communications Network (GCN) delivers the industry’s highest reliability and call quality in the contact center industry.

Talkdesk is the industry’s first cloud-native enterprise contact center vendor, offering the scalability, reliability, and security required by large global organizations. Talkdesk Global Communications Network (GCN) supports enterprise global brands running multiple thousands of agent positions around the world with the highest reliability, call quality, and scalability.

Born microservices

Founded in 2011, Talkdesk is the only major contact center technology built with a microservices API-first architecture. Software built as microservices can be broken down into multiple component services, so that each can be deployed independently without compromising the integrity of an application. This translates to:

- **Higher reliability**
  If one microservice fails, the others will continue to work. This also enables zero-downtime maintenance.

- **Faster innovation**
  Microservices enables continuous delivery, as apps are easier to build and maintain. API-first design allows our customers to extend capabilities to take advantage of evolving technologies like artificial intelligence.

- **Superior scalability**
  Demanding services can be deployed in multiple servers to enhance performance.
For global coverage, legacy and first generation cloud contact center solutions force businesses to run separate contact center instances in different regions or countries. Most of these systems were built on single-tenant, managed hosted platforms that don't scale well as they require working with multiple individual networks in global regions.

With Talkdesk GCN, the public switched telephone network (PSTN) is woven into one global super telecom network, allowing you to run a singular, global contact center, saving money by not having to replicate your infrastructure in each individual global contact center location.

Talkdesk GCN offers the largest selection of phone numbers available for instant provisioning in over 100 countries and 50,000 specific localities. If you already own a carrier relationship we can onboard it so you can maintain existing customer commitments.
Maximum reliability

Talkdesk GCN is built with distributed systems engineering practices using diverse cloud infrastructure providers, including Amazon Web Services (AWS). We have geographically distributed data centers and invest in redundancy on every level to eliminate single-point-of-failure. DDoS mitigation is in place with edge servers across the globe. Talkdesk GCN ensures communication reliability by having:

- Automated failover with points of presence (PoPs) in eight globally-distributed regions.
- Data centers connected to multiple Tier 1 carriers to guarantee reliable connections for call termination.
- The ability to reroute call paths around carriers that experience any failures.
- In the event GCN service is disrupted, Talkdesk Proxy, our always-ready backup CPaaS is triggered to process calls and ensure their delivery.
System monitoring

Talkdesk uses various services to provide dashboards to show overall system health and are able to send alerts to our on-call paging service as a Slack channel to help coordinate investigation efforts.

Our NOC/On-Call Engineering Team operates 24x7x365 and will investigate the cause of an issue and act to resolve it as soon as possible. After each incident, a post mortem is written to fine tune our processes. Fire drills are performed on a weekly basis to ensure that the On-call team knows how to handle situations.

Disaster recovery/failover

In the event of a major failure, the goal is for our On-call team to be able to recover critical functionality within 10 minutes. Critical Functionality is defined as the minimum needed for our users to continue servicing their customers:

- Logging into Agent Workspace
- Receiving inbound calls
- Making outbound calls

The team will make the decision to switch to any of the available Disaster Recovery sites taking into account the situation at hand.
Industry-leading global call quality

Talkdesk offers industry-leading call quality, with an average mean opinion score (MOS) of 4.25 globally and 4.28 for North America. MOS measures subjective call quality for a call from 1 for unacceptable to 5 for excellent. For comparison, typical voice over IP (VOIP) calls are in the 3.5 to 4.2 range.

Our call quality is guaranteed by a Global Low Latency (GLL) architecture. GLL optimizes call quality for all geographies, ensuring that each call travels the most direct route through regional nodes, resulting in fewer dropped packets, less jitter and minimal delay. GLL gives Talkdesk the confidence to offer voice quality SLAs.

Talkdesk GCN offers priority voice packet routing in which over 1 million routing optimizations are performed per year to ensure that if a carrier goes down it does not impact our customers’ calls.

USA
MOS: 4.28
Jitter: 1.78ms
Packet Loss: 0.15%

Ireland
MOS: 4.37
Jitter: 1.93ms
Packet Loss: 0.13%

Germany
MOS: 4.31
Jitter: 1.83ms
Packet Loss: 0.15%

Japan
MOS: 4.34
Jitter: 1.92ms
Packet Loss: 0.20%

Brazil
MOS: 4.17
Jitter: 2.34ms
Packet Loss: 0.20%

Singapore
MOS: 4.19
Jitter: 1.92ms
Packet Loss: 0.25%

Australia
MOS: 4.26
Jitter: 1.97ms
Packet Loss: 0.16%
Summary

Today’s digitally transformed world has put new pressures and expectations on contact centers. Innovative global brands trust Talkdesk to help make customer experience their competitive advantage. This trust is enabled by a modern global communications network, Talkdesk GCN, that delivers the reliability, scalability, and call quality required by today’s customer-centric companies.
About Talkdesk.

Talkdesk® is a global leader in redefining customer experience in the enterprise. We provide a better way for businesses and their customers to engage with one other. Our speed of innovation and global footprint reflect our commitment to ensure businesses everywhere can deliver better customer experiences through any channel, resulting in higher customer satisfaction, cost savings and profitability.

Talkdesk was founded in 2011 by current founder and CEO Tiago Paiva. In August 2021, Talkdesk announced our series D funding of $230 million and is now valued at more than $10 billion dollars, placing it among the most highly valued private companies in the SaaS or enterprise software industry. The funding came from new investors Whale Rock Capital Management, TI Platform Management, and Alpha Square Group; as well as from existing investors Amity Ventures, Franklin Templeton, Top Tier Capital Partners, Viking Global Investors, and Willoughby Capital. In total, Talkdesk has now raised $498 million in funding since inception, reflecting strong investor confidence and highlighting the strategic role of superior customer experience among top global brands. Talkdesk is recognized as a leader in the 2021 Gartner Magic Quadrant for CCaaS (Contact Center as a Service), one of only three leaders in the report. Today, Talkdesk has over 1,800 employees across the globe and is headquartered in San Francisco.

Innovative companies around the world, including IBM, Acxiom, Trivago and Fujitsu partner with Talkdesk to deliver a better way to great customer experience.

Read more about Talkdesk.

Want to learn more? Contact Talkdesk at 1-844-332-2859

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