

Data Center Technician Interview Prep Guide:

What's a Data Center Technician?

Data Center technicians occupy a special place in our organization, as they are uniquely placed at the front lines of Google efforts to deploy and maintain one of the largest and most complex private data infrastructures in the world. In charge of keeping Google's services online at all times, Data Center Technicians at Google combine technical expertise with an aptitude for analysis and troubleshooting to handle and resolve a wide range of scenarios.

Why Google? Impact.

Google is and always will be an engineering company. We hire people with a broad set of technical skills who are ready to face some of technology's greatest challenges and make an impact on millions, if not billions, of users. Working on Google's hyperscale data center and edge infrastructure gives you opportunities to influence the operations that support the largest technical infrastructure the world has ever seen.



The Technical Phone Interview

The initial 45 minute interview over Google Meet will focus on your role related knowledge with Hardware Operations. You can expect a short introduction and general experience questions— where you may be expected to speak to some of the experiences listed on your resume and provide examples.

You will also be asked a handful of technical questions focused on the following areas:

Hardware and Operating Systems - Demonstrate your knowledge of computer Operating Systems (OS) with a demonstrable understanding of more than just the GUI - this will be your chance to show us what you know. We'll be testing your knowledge on a number of topics whether it be troubleshooting common or complex OS issues, automating repetitive tasks, or even brainstorming the right type of storage media to use for a project just to name a few. Additionally, highlight common hardware knowledge and components, what they do, how they work, and why they fail. The ability to build, maintain, troubleshoot, and repair complex hardware is critical in this role.

Networking - We'll look for your ability to describe in detail how networks function. You will be expected to demonstrate a working knowledge of network services and network hardware which should be complemented by a solid understanding of network theory such as common protocols (TCP/IP, UDP, BGP, ICMP, etc), MAC addresses, IP packets, DNS and the OSI layers for example. Lastly, brush up on cabling types and properties.

You may be asked theoretical questions as well. For example, "How would you troubleshoot the following problem?" or "How would you design a solution for a hypothetical project?" These questions are designed to give you the chance to apply your analytical skills to new problems, including problems that you may not have faced before in your career.

The Second Round Interviews

For the second round interviews, expect three 45 minute interviews. A break between interviews may be included depending on time of day. Similar to the first interview, each interviewer will ask questions to better understand your thought process overall, and questions centered on your subject matter expertise. It's not uncommon to pick a topic mentioned on your resume and ask questions regarding your previous experience.

Preparing to Interview

In addition to Role Related Knowledge (RRK), we evaluate three different attributes throughout the three virtual onsite interviews: Googleness, Leadership, and General Cognitive Ability.

Build for everyone

Googleness: Share how you work individually and on a team, how you help others, how you navigate ambiguity, and how you push yourself to grow outside of your comfort zone.

Leadership: Be prepared to discuss how you have used your communication and decision-making skills to mobilize others. This could entail stepping up to a leadership role at work or with an organization, or by helping a team succeed even when you weren't officially the leader.

General Cognitive Ability (GCA): This attribute is designed to evaluate how you solve problems. There are no "right" or "wrong" GCA solutions; rather, we're interested in observing the data-driven approach you take to identify a logical recommendation with the ability to support your solution.

We suggest following this 4-step framework:

1. **Understand:** Show you understand the problem by asking clarifying questions to get additional context. If you don't get a direct answer to your question, leverage assumptions to begin creating tangible information to work with.
2. **Prepare:** Prepare by verbalizing the data needed to identify a solution — this may include existing, historic and/or new data. Be clear about where you might seek existing data points or how you might gather new information.
3. **Identify a solution:** Feel free to weigh out options, but ultimately articulate your recommendation.
4. **Support your solution:** What was the outcome/result? Explain how you would track effectiveness over time.

The questions during this interview may be hypothetical or behavioral in nature.

- Hypothetical questions may be entirely unrelated to your experience.
- Behavioral questions may ask you for real-life examples of times where you had to think outside of the box to overcome challenges.

Sample Questions:

1. *[Behavioral] Give me an example of when you solved a technical problem without an obvious solution*
2. *[Hypothetical] Imagine there is an outage. How would you go about troubleshooting the issue and repairing it?*

Role Related Knowledge (RRK) Specialization Deeper Dive

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Hardware Specialization

This **hardware** specific interview is designed to get a sense of your deeper knowledge and understanding of hardware technologies and concepts. The hardware-specific interview is focused on assessing your knowledge of components used in a data center or PC — such as server components, hard drives, motherboards, and other related components. The interviewer may also ask questions that assess your ability to troubleshoot hardware in a data center environment.

Operating Systems Specialization

This **operating systems** specific interview is designed to get a sense of your deeper knowledge and understanding of OS technologies and concepts. The OS specific interview is looking to evaluate your ability to navigate an operating system. The interviewer may ask command related questions, what you'll usually see on certain screens, and where one might go in command to find information. Proficiency or at least familiarity with command line interface is key.

Networking Specialization

This **networking** specific interview is designed to get a sense of your deeper knowledge and understanding of networking technologies and concepts - how they work, how they can be applied, best practices of designing systems using them, performance tuning, etc. Show off your depth of knowledge and understanding of network theory, like different protocols (TCP/IP, UDP, ICMP, etc), MAC addresses, IP packets, DNS, OSI layers, and load balancing. Some of these questions will ask you to apply your Networking knowledge using real-world problem statements.

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Additional Resources

A Look Inside Google Data Centers

[The Innovation Behind Google's Data Centers \(Cloud Next '18\)](#)

[An Insider Look: Google's Data Centers \(Cloud Next '19\)](#)

[360 Tour of Google's Data Center](#)

[Google's Data Center Security: 6 Layers Deep](#)

[How the Internet Lives: Google Podcast](#)

[Animated Series: All About Google Data Centers](#)

[Google Data Centers](#)

[Life at Google Data Centers](#)