How To Become A Data Center Technician

Brittany Gates

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About The Ebook

My name is Brittany and I'm the author of this ebook. I decided to write it because I wanted to collect all the blog posts I wrote on another website over several months about this topic.

I was a Data Center Technician with Google for about three years before I moved onto my next role at the company. During my tenure in that role I made several videos on YouTube about how to become a Data Center Technician (in addition to the blog posts) since the role started its rise in popularity in late 2023 into early 2024.

Finding updated information about how to get a job as a Data Center Technician, let alone seeing someone in that role speak about their daily duties, was sparse. Mostly due to secrecy from employers.

Yet, they decided to reveal more about their data centers, and their need for Data Center Technicians (which I'll call DCT for short from now on), due to the Artificial Intelligence boom starting in 2023.

That's why I wrote the blog posts and made the YouTube videos. I wanted to help people looking to change careers or find a new role in the Technology Industry switch over to become a DCT. And it worked! I got comments, emails, and DMs on LinkedIn from individuals with DCT offers and jobs using my content.

Now I want to help you! I wrote this ebook to be a guide to help you get a job as a DCT. Although I can't guarantee you'll get a job, I do believe the information provided within it can help you get at least an interview.

My Data Center Employment History

In the previous section I said I worked as a DCT at Google for about three years. That wasn't my first time working in that job during my long career in the Information Technology (IT) field. My employment working in another IT field introduced me to data centers.

I got a tour of the small data center on my employer's premises and I was instantly intrigued. Although I could look at the racks of servers, I couldn't touch them. My role at the time didn't give me that permission. I couldn't even enter the room without an escort. Yet, I wanted to do that work so I improved my skill-set.

I finally got my first job in a data center as a DCT in 2014. After that job I was able to continue working at a DCT over the years. Below is a brief history:

Peak 10 (Flexential)

In 2014 I got my first data center technician job at Peak 10 (now Flexential) in Alpharetta, GA. I worked the third-shift performing duties like rack and stack, assisting customers, monitored systems, running Ethernet and fiber optical cabling, and installing Power Distribution Units (PDUs) inside racks. It was a good introduction into a mid-size colocation data center, and the regular duties technicians faced.

Short-Term Contracting Stint

I worked a short-term stint (three months) repairing servers in a data center for a company in 2015.. I don't speak much about this stint because it wasn't a great experience. Thus, I decided to leave after such a short time.

Twitter

In 2017 I got a job as a Site Operations Technician at Twitter to work at their Atlanta, GA data center. I was ecstatic to get this job because I enjoyed using Twitter, and wanted to work at a Silicon Valley company. At that point in my career it was the largest data center I worked at. I stayed at Twitter for over 3 years, leaving in December 2020 to start my own business.

Google

In May 2023 I started at Google as a Data Center Technician 2. I was on a team traveling to different data center locations to deploy the Machine Learning machines running Google's AI software, and to train the other DCTs on how to deploy and repair those machines.

In 2024 I switched over to the Network Projects team to deploy the networking infrastructure and cabling connecting the machines to the outside world.

In May 2026 I accepted a new role at the company as a Hardware Validation Engineer.

Is The Data Center Technician Role The Right Job For You?

Before you dive into discovering how to become a Data Center Technician, please read this section first to determine if this role is the right job for you. It does have some quirks which can be deal-breakers for some people. It's best to know the pros and cons of a job before setting your mind to believe this job would be a perfect fit.

Physicality Of Data Center Jobs

When I think about the various positions available in the IT Industry many of them are sedentary. I sat in a chair for a majority of my eight hour shift as a Technical Support Technician. I only got up from my desk to go to the bathroom or to lunch.

Other sedentary roles in IT include Software Engineers, Database Administrators, and Network Engineers to name a few. Nearly all of the employees performing these jobs sit down for the majority of their day. To combat the constant sitting some employers installed standing desks, but a recent study shows those don't really help improve a person's health.

If you don't want a sedentary job then becoming a DCT could be the right job for you. Especially if you are already physically active in your personal life, and want to stay active in your professional life. Here's a few examples describing the physicality of the DCT role:

- Data centers are large buildings and DCTs have to transverse large areas to perform their daily duties.
- DCTs have to squat, kneel, and climb ladders to access the servers and/or networking devices in server racks.
- Computer hardware and/or networking equipment is heavy. Thus, DCTs need a good amount of strength to move it around.

Seeking Variety of Daily Tasks

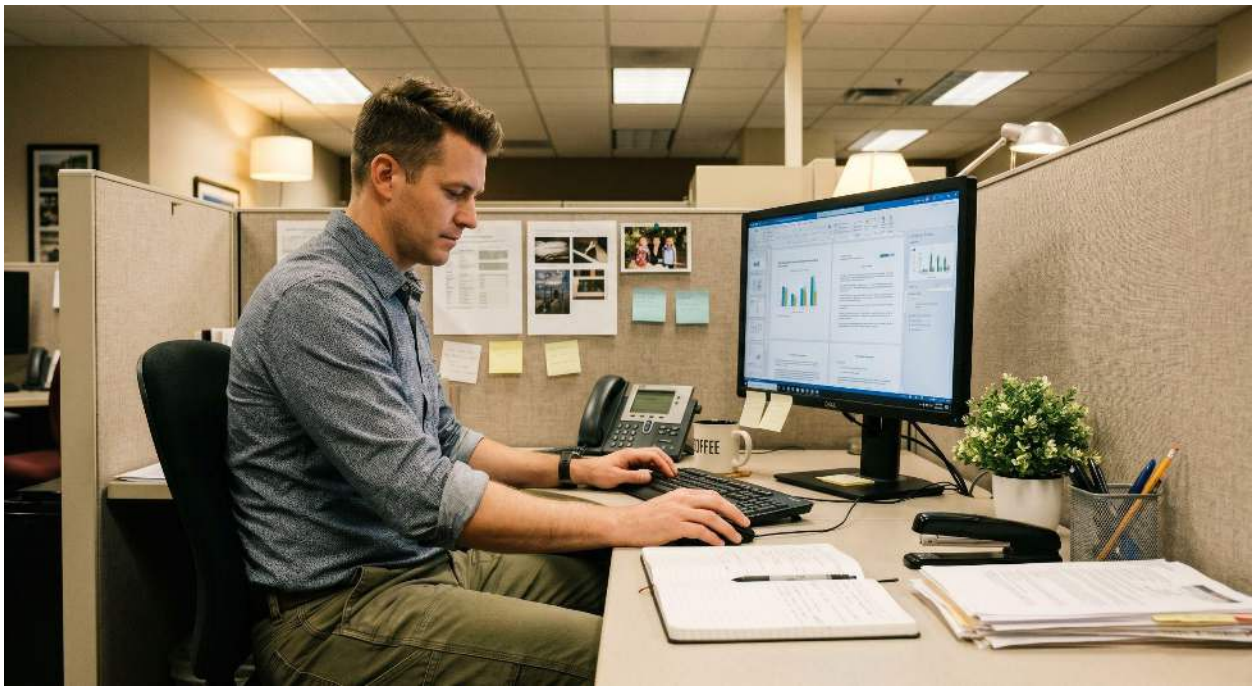
You could be the type of person seeking to work on a plethora of different tasks per day. Variety does make the work day go by faster. Or you could be the type of person who doesn't enjoy working on repetitive tasks over and over. If either situation fits your personality then becoming a DCT would be a good choice for you.

DCTs usually receive their workload via tickets from a ticketing system. However, if they are working on a project they could receive their workload from a Project Manager or even their Supervisor.

Now when I worked as a DCT I viewed working tickets as a mystery game because I didn't know what each would bring. One ticket could have me rack and stack networking hardware and servers in an empty rack on the data center floor. Then the next ticket had me run Ethernet cabling from one patch panel on one side of the data center to a rack on the other side. I also had tickets where I escorted a vendor, like a Field Service Technician from an Internet Service Provider (ISP), into the data center's main network room for

that person to either perform a repair on a fiber optic cable, or install some equipment.

It's Great For Loners



If you're the type of person that prefers their own company, and doesn't mind working alone in a large building (except for the Security Guards patrolling), then this job could be for you.

Many data center providers have their DCTs working on different shifts because the data center never closes. Usually the Third Shift (Night Shift) has the least amount of DCTs scheduled due to the lighter workload. This shift would be great for loners.

I worked the Third Shift when I worked at Peak 10 (Flexential) and it was just me and the one Security Guard at the time. My workload was pretty light as customers didn't come on-site to do any work. Usually I completed the tasks left over from the Second Shift and worked on projects (like moving empty racks onto the data center floor). Every once in a while I would get a phone call from a Network Engineer performing maintenance to remove a failed linecard or perform some other task.

The only time I didn't like working alone was when I had more tasks than I could manage. Having a coworker around then would have been helpful!

How To Become A Data Center Technician

The information in the following sections works for those already working in the IT Industry in another role, and want to change so they can get a DCT role. This part of the ebook also helps those who aren't in the IT Industry get this job because they are interested in changing careers.

There is a helpful website Google created explaining the skills needed as a DCT. Although this website was created for those wanting to apply for a job at Google, the content there applies to DCT roles at other employers. You can view the website here.

Learn Computer Hardware Installation & Troubleshooting

One of the many daily tasks of a DCT are the following:

- Rack and stack servers and/or networking devices
- Install computer hardware into servers
- Upgrade computer hardware in servers
- Install cabling (such as Ethernet or Fiber Optic)
- Troubleshoot issues with servers or cabling

When I worked as a DCT I replaced defective hard drives in servers. Or a customer would request us to replace a hard drive in their server with one with a larger capacity. Thus, it was important for me to know how to safely

install and remove all types of hardware components so I didn’t break the part or the customer’s server.

To learn this skill I used to recommend that people build a computer, but I can't recommend that anymore due to the high prices of computer parts. Both hard drives and memory (RAM) are sky high! A standard 1TB SSD is easily $150 on Amazon. As for RAM, 16GB (2 x 8GB sticks) DDR4 kit from an off-brand manufacturer costs $130+ on Amazon. Before the AI boom both of those prices would be half. However, if you want to build a computer to gain hands-on experience I suggest you search places like Facebook Marketplace or Craigslist to find refurbished or used computers for cheap.

Finally, you might get lucky and find someone giving away broken computers. That's a fantastic way to build troubleshooting skills as you have to figure out why the computer doesn't work.

Speaking of troubleshooting, DCTs have to troubleshoot server problems and determine what caused it. Is it a faulty part? Or is the problem corrupted software? While I make this part sound simple, it isn’t.

Learning troubleshooting skills isn't easy. A great place to start for free is YouTube. You can find all types of videos covering various types of troubleshooting procedures in detail depending on the problem. Another way to learn is to read troubleshooting documentation from computer part manufacturers.

I do consider hardware and software troubleshooting an art, and requires constant practice and dedication to become proficient.

Become A Help Desk Technician First

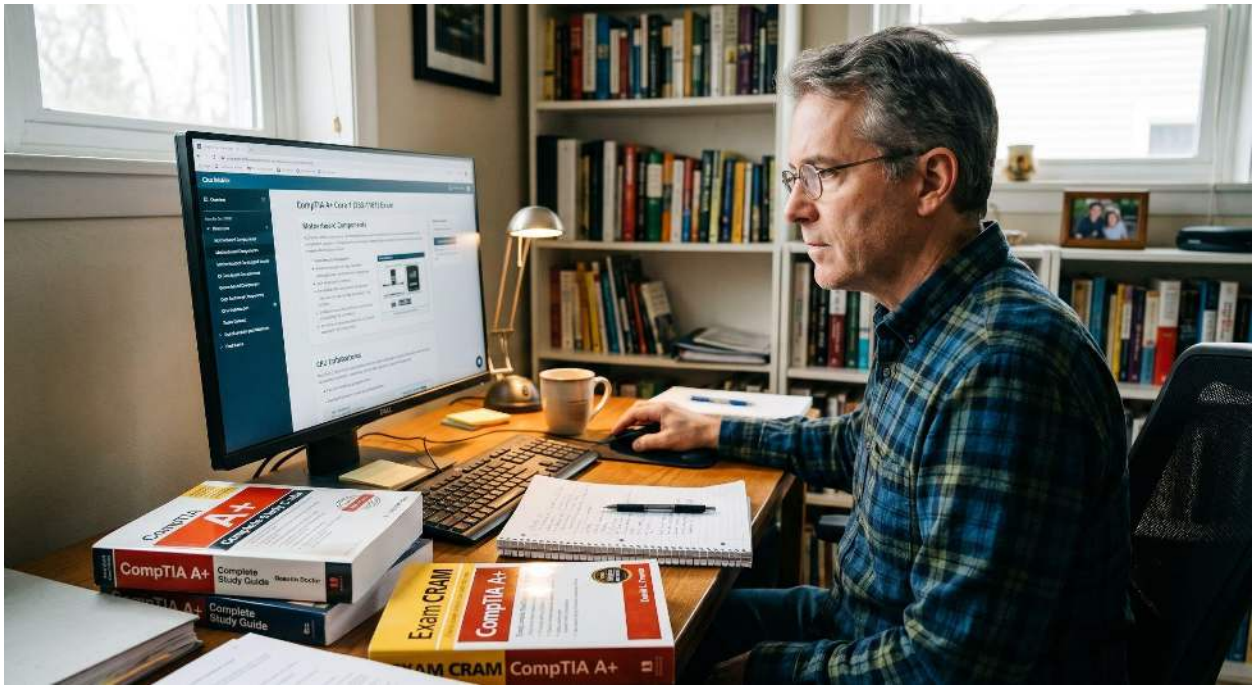
I believe one of the best ways to develop computer hardware and software troubleshooting skill-set is to get an entry-level job as a Help Desk Technician. This role helps people, external or internal customers, fix their IT issues over the phone or through chat. To learn more about the role check out this website.

This job is great for those with little to no experience in IT because most employers hiring for entry-level Help Desk Technicians look for those with little to no experience. The average salary for this position in the United States per Indeed is $23 dollars per hour. I know for some people that may not be a large salary, but it's important to build one's resume with professional IT experience (which this role will do), along with practicing their skill-set.

I don't recommend roles I haven't done myself. In the early part of my IT career I was a Help Desk Technician. Then I progressed to a Desktop Support Technician. These roles not only helped me use and improve my computer hardware and software troubleshooting skills, but they helped me develop customer service and other soft skills.

If you're interested in learning how to become a Help Desk Technician I found this 9 hour course from The Cyber Mentor on YouTube. I also found this playlist on YouTube describing the types of tickets technicians will face and how to properly troubleshoot and resolve them.

Consider Certification



Another way on how to become a Data Center Technician is to consider getting an IT certification. I suggest you consider getting one (but not both) of the following two certifications:

- CompTIA+
- Google IT Support Certificate

Details About The CompTIA+ Certification

The A+ Certification is good for all types of entry-level IT jobs. To get the certification requires passing two exams. Each exam is currently $265 USD.

Study materials are an additional cost. CompTIA has their own "official" study material, but third-party providers also have books and videos individuals can purchase. However, there are plenty of videos on YouTube one can watch for free. A popular course available on YouTube is from Professor Messer. That link will take you to the 2026 playlist containing all the videos.

Details About The Google IT Support Certificate

The certificate's main focus is to provide beginners a solid foundation in the following:

- Computer hardware knowledge
- Computer networking knowledge
- Troubleshooting skills

- Knowledge about operating systems
- Information about IT Security and System Administration

This foundation prepares certificate holders to apply for jobs like IT Support and System Administration.

The certificate uses videos hosted on Coursera, allowing students to learn at their own pace. Thus, students can learn the material no matter where they are located as long as they have an Internet connection.

In addition, there are hands-on activities students need to accomplish to not only proceed in the coursework, but to actually understand what they learned.

Finally, there are assessments students must pass to proceed through the course. There is a limit on the number of times a student can fail each assessment in a 24-hour period. Then students have to wait a period of time before trying again.

Like the A+ Certification, the Google IT Support Certificate is good for various types of entry-level IT jobs too. To get the certification requires finishing the entire course on Coursera. The course costs $49 a month.

Choose Which Type Of Data Center Is Right For You

There are two types of data centers: Colocation and Hyperscale. Depending on which one you choose will shape your daily duties and career progression. There isn't a right or wrong choice because Colocation data centers have benefits Hyperscale data centers do not (and vice versa). The major difference between the two that probably will influence your choice is location. First, I'll define Colocation and Hyperscale data centers.

Colocation Data Centers

Colocation (colo for short) data centers according to Equinix "refers to the placement of an organization's own servers and other essential computing hardware for data storage in rented space within a physical data center owned and/or operated by a third party." Thus, the third party (like Equinix) owns and operates the data center. They maintain the power and cooling infrastructure, along with providing DCTs to provide all types of assistance to their customers.

Colo data centers are in major cities in various countries. This gives better access to their customers who are usually in those major cities. It also puts the colo data center close to Internet connections from different Internet Service

Providers (ISPs) and dark fiber. If you want to work in a major city as a DCT then a colo data center is a great choice for you.

Let's look at some normal duties of a DCT at a colo. I took this information from a Technician II job at Digital Reality:

> "The Remote Hands Technician II will assist all Digital Realty customers by providing "best in class" customer and technical support. The Remote Hands Technician II will work with and support all customer demands which may include, racking and stacking of equipment, cabling, cross connects, etc. Internally, the Remote Hands Technician II may work with the Deployment and Implementation teams, the Global Command Center, Provisioning team and Project Management to ensure relevant installations meet delivery dates and create a positive customer experience. The Remote Hands Technician II will be primarily responsible for responding to Customer Requests within the Service Level Agreement time frame. The Remote Hands Technician will also assist other members of the Operations Team ensuring 100% uptime to all customers."

Here are some of the skills candidates need to work in a colo data center:

- Years of experience in Telecommunications or Data Center related field
- Understanding of telecom structured cabling standards
- Understanding of network device deployment
- Ability to communicate written and verbally
- Work flexible shift schedules
- Provide rotational on-call coverage
- Use of industry standard test equipment
- Troubleshooting and root cause analysis skills
- Professional business communication and interpersonal skills
- CompTIA A+ / Net + Certification preferred
- General knowledge of AC/DC electrical theory
- Lift and handle up to 50 pounds
- Work under a raised data center floor
- Climb ladders (up to 16 feet) to reach plenum spaces

If you're interested in working for a colocation provider there are both global and regional employers. First, here are the top global providers:

- Equinix
- Digital Realty
- NTT Global Data Centers
- QTS Data Centers (Blackstone)
- CyrusOne

- Iron Mountain Data Centers
- Switch Inc.
- Global Switch
- Vantage Data Centers

Here are the top specialized and regional colocation providers:

- CoreSite (American Tower)
- EdgeConneX
- KDDI/Telehouse
- Flexential
- Aligned Data Centers
- DataBank

Hyperscale Data Centers

Hyperscale data centers (also called Hyperscalers) according to Red Hat: "provide cloud computing and data management services to organizations that require vast infrastructure for large-scale data processing and storage." Usually those organizations will be the cloud computing companies such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP). Thus, external customers cannot place their own servers and networking hardware in a Hyperscale data center.

Another major difference with Hyperscalers is the location. Most aren't located in major cities due to their massive size. Some of the campuses require hundreds of acres of land, which is hard to get in most major cities around the world today. This pushes them to purchase land at a minimum of a thirty minute commute of a major city. If you don't mind living in smaller cities (or commuting from a major city) then Hyperscale data centers are a good choice for you.

Let's look at some normal duties of a DCT at Hyperscalers. I took this information from a job at AWS:

> "Data Center Technician position involves in-depth hardware and network diagnostics followed by physical repair as well as participating in an on-call rotation. AWS Infrastructure Services owns the design, planning, delivery, and operation of all AWS global infrastructure. In other words, we're the people who keep the cloud running. We support all AWS data centers and all the servers, storage, networking, power, and cooling equipment that ensure our customers have continual access to the innovation they rely on."

Here are some of the skills AWS requests of candidates for the above position:

- Work a flexible schedule including weekends, nights, and holidays
- 18+ months of computer/server hardware troubleshooting or related IT experience
- 18+ months of computer layer 1/2 networking experience (including troubleshooting and repair)
- Experience in a data center or other critical environment
- Bachelor's degree or equivalent professional or military experience in an IT-related field (e.g. computer science, network engineering, etc.)
- Industry standard certifications (CompTIA, CCENT, Network+)
- Understanding of Linux or similar operating systems

Let's compare that to a DCT job posting from Google:

> “The Hardware Operations team is responsible for monitoring the state-of-the-art physical infrastructure behind Google's powerful search technology. As an Operations Technician, you'll install, configure, test, troubleshoot and maintain hardware (like servers and its components) and server software (like Google's Linux cluster). You'll also take on the configuration of more complex components such as networks, routers, hubs, bridges, switches and networking protocols. You'll participate in or lead small project teams on larger installations and develop project contingency plans. A typical day involves manual movement and installation of racks, and while it can sometimes be physically demanding, you are excited to work with infrastructure that is at the cutting-edge of computer technology.”

Here are some of the skills Google requests of candidates for the above position:

- Experience with assembly of mechanical or electrical systems, or performing component-level repairs and troubleshooting on technical equipment.
- Ability to lift/move 50lb (23kg) of equipment as required and ability to exert yourself physically over extended periods of time, including frequent bending, kneeling, climbing, pushing/pulling and lifting.
- Must have the ability to work non-standard hours, including working weekends, night shifts, holidays and on shift-based schedules as required.
- 1 year of experience diagnosing and troubleshooting one of the following: operating systems and computer/server hardware or networking protocols.

Find Locations Containing Data Centers

Where to find a DCT job depends on your location. Some states contain hundreds of data centers, while others only have just a few. Using the Data Center Map website, let's look at the locations with the most data centers.

United States

The United States has the most data centers in the world. At the time of publication there are over 4200 data centers throughout the entire country. I decided to highlight the states with more than 200 data centers as that would provide the most opportunity for applicants to apply and hopefully get a job. Here's that list:

1. Virginia
2. Texas
3. California
4. Illinois
5. Georgia
6. Ohio

Outside United States

For those living outside the United States you still have many opportunities to find a DCT role because there are several countries containing hundreds of data centers. Again, I decided to list the countries with more than 200 data centers so applicants can hopefully get a job. Here's that list:

1. United Kingdom
2. Germany
3. China
4. France
5. India
6. Canada
7. Australia
8. Japan
9. Italy
10. Brazil

Consider Relocating For A Role

This advice I don't give out readily because relocation is not easy. And I know from experience. However, if you really want to work in a data center and the city or state or country you live in doesn't have many (or any) then you will have to make a move. This role doesn't offer any remote working opportunities.

What I suggest is to apply to companies offering relocation assistance. You can search online for which data center providers offer relocation assistance. Or you can read job descriptions for language if relocation assistance will be offered.

How much companies will offer isn't usually discussed until they make a job offer to a candidate. It could be as low as a couple of thousand dollars to as high as several thousand dollars.

Find And Apply For Positions

Speaking of getting a job offer, the first step toward that is finding and applying for open DCT roles. During your search you will find both permanent and contract full-time roles.

I understand getting a permanent position is more desirable because it offers better job security, salary, and benefits. However, if someone doesn't have the experience needed to get a permanent job, getting a contract role gives that person not only the needed experience, but a possibility of converting into a permanent position. I explain why in the following sections.

Contract Roles Usually Have Easier-To-Meet Minimum Requirements

Many contract DCT roles have easier-to-meet minimum job requirements than permanent roles. Employers hiring for these jobs usually ask for six months to one year of experience as a DCT from a previous employer. There are even contract companies willing to work with candidates with less

experience than that if they have computer hardware and software troubleshooting experience.

Contract Data Center Technician Roles Usually Work With Major Companies

Contracting companies source candidates to work with their clients which are usually major data center providers. It's normal for AWS, Google, NVIDIA, Microsoft, Meta, and other companies to hire contractors to perform various DCT duties. Thus, it provides candidates opportunities to possibly get a permanent job with one of those major companies after working a specific length of time. However, this is not always guaranteed.

What To Look For In Job Descriptions For Contract Roles

What you want to look for in the job description for any contract role are the following:

- Job level: L2 DC Technician or Data Center Technician I
- Type of contract job: Long-term or short-term
- Shift schedule: 40 hours a week Monday through Friday, or 4 x 10 hour days
- Salary: Either per hour or per year
- Benefits: Medical, Dental, Retirement, etc.

The job level is important because that's what you will put on your resume for your professional experience.

As for the type of contract job, getting either a long-term or short-term is fine. Sometimes companies have a project with a fixed duration and need support. Again, this is professional experience you can put on your resume. However, getting a long-term role is better due to not having to jump around from job to job.

As for the shift schedule, I suggest all candidates be flexible as data center work is 24 hours a day, every day of the year. Thus, some roles can have a "normal" day shift five days a week. Yet, other roles have 4 x 10 hour days over the weekend or during the Second Shift.

Regarding salary, it's going to depend on your area. Higher cost-of-living areas will pay more than lower cost-of-living areas. Finally, a role with a higher job level will pay more than a role with a lower job level.

Finally, some contract roles will provide benefits, but some may not. It depends on the contracting company.

Prepare For The Interview

In my opinion this section is the most important in the entire ebook. While it takes quite a bit of work to get an interview for a DCT role, preparing for that interview requires a greater amount of work!

Your interview will probably be your only chance of getting an offer, unless the employer uses multiple interview rounds. Even if the latter happens, a bad interview round can cause the employer to not offer you the job.

I interviewed over 50 DCTs candidates during my tenure as a DCT at Google. I also interviewed candidates when I worked at Twitter. I know when candidates prepared for the interview and when they didn't. I even had a candidate admit he didn't even prepare! I guess he thought winging it was a suitable strategy.

I suggest re-reading this section again once you get scheduled for an interview so you can prepare properly.

Know The Role

The first way you should prepare for the interview is to know the role inside and out. This increases your chances to have a successful interview.

You may think this would be common sense to all candidates, but it isn't. I've interviewed individuals who didn't really know, or understand, all the duties of

a DCT and were surprised by the manual nature of the job. Because of that, those individuals didn't get a job offer.

You should read the job description many times, taking notes using whatever medium you like. That way you can develop questions and answers for a mock interview. Also, either take a screenshot of the job posting or copy the text into a word processing program. Some companies remove their job postings after some time.

Finally, use various sources to understand what a DCT does. I made YouTube videos about what I did in the data center. Candidates may consider using LinkedIn to find currently-employed DCTs, contact them, and ask them for additional information.

Read Google's Data Center Technician Interview Prep Guide

While this guide was written specifically for those interviewing for a DCT role at Google, the guide is pretty generic and can work for candidates interviewing with other employers for the same role.

Here are some topics that are generic (thus, universal) you can take from the guide and apply it to interviews from other employers:

- Prepare for open-ended questions because interviewers want to see how you think. They want to know when it comes to troubleshooting, do you have a standard process, or do you wing it? Are you confident with your troubleshooting, or do you show signs of indecision?
    - An example of an open-ended question: "You get a ticket from an end-user that they cannot browse the Internet on their work laptop. How would you troubleshoot this issue?"
- Be ready to discuss your Role-related knowledge (RRK) from your previous employers. Don't just list off what you did at your previous job; explain how you discovered and solved problems using your knowledge.
- There will be many questions to test your problem solving abilities. While getting the right answer is good, it's also important to showcase how you came to get the right answer. Like when you did math homework, you had to show your work. With problem solving questions you have to do the same.
- Prepare to discuss your leadership skills and how you utilized them within the workplace. Employers want to know that you can take on projects without being told, help lead others in their time of need, and become an asset on the team.

You can read the guide here. Pay close attention to the hypothetical and behavioral interview section because employers ask many questions from those two categories. Again, they want to see how to interact with customers and your teammates, along with your technical expertise.

Know The Latest Industry Developments

This is important because major technology improvements require employers to change their hiring criteria. If candidates don't know about these improvements they'll be left behind.

The Artificial Intelligence (AI) boom caused data centers around the world to change. They invested in water-cooling technology, which wasn't required a few years ago. Other providers changed their servers to offer more GPU options than CPU options so customers can train and run their models. Thus, candidates need to know about these changes so they can explain during their interviews how they can properly troubleshoot and resolve any issues arising from cooling and/or GPU failures.

If you aren't up-to-date regarding AI or Machine Learning (ML) then I suggest now is the best time to learn.

Ask Questions

Finally, you should have questions about the role, the team, the company, and how you can grow in the company. Every interviewer will give you the chance to ask questions during the interview. If you don't then the interviewer will probably think you aren't serious about the role. That can prevent you from getting a job offer.

"Brittany, I don't know what questions to ask. What are some questions you asked in previous interviews?"

I always ask the following:

- Can you tell me what a normal day is like?
- Is overtime required for this job? If so, how much?
- What is a big project the team is currently working on? If there isn't one, is there one upcoming?
- What are some difficulties the team is running into at the moment?
- Is there something I can prepare for now to help out immediately if I get hired?
- How can I succeed in this job? What technologies or skills do I need to learn?
- How can I grow at the company? Are there any training opportunities available?

Think of what is important to you and delve deeper into those topics. If career progression is a key goal then ask the interviewer. Or if you want to improve your data center skills then ask how the employer can help you. Remember, a job interview is the only opportunity to learn the specifics about the role and the employer. If you don’t do the proper due diligence you could end up in a job you hate.

Conclusion

I hope this guide helps you on your journey to become a Data Center Technician. Unfortunately, I can't guarantee you this guide will get you a role. However, if you put in the work, build your skill-set, and apply yourself I believe eventually you'll get a role.

Take it from me as someone who has nearly 20 years of IT experience: The journey for this role (or any other IT role) is long, and usually rough. Yet, if you stay motivated, disciplined, and don't give up, you will be successful.