

Welcome to your guide...

# 26 DEVOPS INTERVIEW QUESTIONS & ANSWERS

Get more guides, books and training courses at the website [www.How2Become.com](http://www.How2Become.com).

Copyright © PassMyInterview.com. All Rights Reserved.  
For personal use only.

## **Q1. Tell me about yourself and why you want to work in this DevOps role?**

### **Sample Answer:**

Over the years, I have gained a wide-ranging set of skills, qualities and attributes that, I believe, make me a competent, supportive, professional and flexible DevOps Engineer. I take pride in my work, I take my professional development seriously, and wherever I end up working, I always focus on how I can add value to the organization by providing secure and innovative solutions based on the needs of the business. In addition to possessing solid technical knowledge capabilities, I am also someone who has excellent communication, collaboration and decision making skills. That means, if you hire me within this DevOps role, you will not only be getting someone who always puts the needs of the team and the organization first, but you also get someone who is flexible and adaptable in their work so as to ensure you consistently achieve your commercial and financial objectives.

## **Q2. What are the most important skills and qualities needed to work in this DevOps role?**

### **Sample Answer:**

To be effective when working in any DevOps role, you need three different type of skills: technical, soft and business. The TECHNICAL SKILLS needed include coding and scripting capabilities, infrastructure knowledge, cloud and testing skills, software security skills and also an understanding of major DevOps tools and resources. SOFT SKILLS required within DevOps include strong communication, interpersonal and collaboration capabilities, and also the ability to solve problems, be entirely flexible and adaptable in your work, and also the desire to maintain competence through continuous professional development. Finally, in terms of BUSINESS SKILLS, it's imperative you have an understanding of how your work fits into the wider, strategic goals of the organization you are working for.

## **Q3. Why do you want to work for our organization in this DevOps role?**

### **Sample Answer:**

For me, DevOps is a very exciting field to work in, providing of course, you choose the right organization to work for. Prior to applying for this DevOps role, I carried out lots of research into your organization to make sure it was somewhere I wanted to work for long-term, and also to make sure I was one hundred percent confident I could contribute positively to your goals and objectives. You are clearly an organization that has ambitious, exciting and diverse plans for the future, and I feel my knowledge, my skills and my experience will help you to achieve your goals. Finally, one of the influencing factors that made me really want to work for your organization, is the fact you employ lots of talented people. I want to work with a team of like-minded professionals who are all passionate about their work and who are also striving to achieve the same goal. For those reasons, I want to work here and nowhere else.

**Q4. Tell me about the hardest day you've had as a DevOps Engineer?**

**Sample Answer:**

Perhaps the hardest day I have had as a DevOps Engineer was whilst working on a project for a client in a previous role. This was a cloud-based project and, despite having an initial set brief to work towards, the client continually changed the project specifications. Due to the client's unfortunate haphazard approach to the project requirements, the team started to show signs of stress and frustration. I spoke to the team members and explained how important it was that we still provided a high level of service. Although it was frustrating to have to continually change our approach to the project, this was our opportunity to dig deep, maintain flexibility and also use patience and resilience to get through the project to a satisfactory conclusion. Although the project was very difficult to work on, we stuck together as a team, adapted as and when required and successfully completed everything the client wanted, on time and to the final requested specification.

**5. What are your strengths and weaknesses?**

**Sample Answer:**

I would say my core strengths are my technical knowledge and expertise. I have built up lots of experience in various DevOps positions over the years, and I feel I can bring a wealth of knowledge and experience to your team. Other strengths include my communication and interpersonal skills. This means I can fit into a team quickly, and I will always be unselfish in my work and ensure the needs of the team and the organization always come first. Another strength of mine is my level of commercial awareness. I understand that, in order for your business to be successful, I have to excel in the position. In respect of my weakness, the only one I have is the fact I have trouble sometimes letting go of projects. I tend to get engrossed in projects and I become quite passionate about them. Having said that, I am learning to complete DevOps projects quickly and then move on to the next one, and I will always take onboard constructive feedback from my peers and managers in a positive way as I am someone who is keen to continually grow, learn and develop.

**Q6. You are giving a presentation to a number of non-technical company managers. They have no technical knowledge and they are struggling to understand your presentation. How would you adapt your presentation, so they all understand?**

**Sample Answer:**

I would use visual explanations that they were all familiar with. For example, if the room was full of people who had a passion for cars, which lots of people do, I would use the construction of a car as the analogy when describing my technical solution or idea. For example, I might say:

“If you try to imagine a car travelling along the road, the wheels enable the car to travel forward based on their shape. If you apply the same principle to my solution, you will see that object A is able to move forward because of object B.”, or something similar to that example that they can all relate to. I would also utilize drawings and diagrams, as the visual aspect is far easier to understand and follow.

## **Q7. Where do you see yourself in the future?**

### **Sample Answer:**

I am looking long-term stable employment with an organization that is ambitious and that is also going places. On that basis, I plan to stay here for as long as you want me. You are a great organization with a very strong reputation in your industry. You are also a company that is innovative in its products and services, and you also understand that, in order for you to maintain your market share, you will have to continually change and adapt. That means you will continue to be an attractive organization to work for, so I would like to stay here long term if possible.

## **Q8. How do you handle stress and pressure at work?**

### **Sample Answer:**

Pressure is all part of working in DevOps, and if I am being entirely truthful, I believe I actually work to the best of my ability when I am under pressure. Having said that, stress and pressure need to be managed effectively so that we can all work together to achieve the aims of the organization. To begin with, I believe in proper, effective planning of both time, tasks and projects. Planning helps significantly reduce stress within the workplace. Secondly, I believe in maintaining a positive mindset. If you are a positive, self-motivated and determined person, this rubs off on your work colleagues. Finally, I look after myself outside of work and I eat well, and whilst I am not a massive fitness fanatic, I often go walking and carry out physical exercise to clear my head and this also helps to reduce stress, too.

## **Q9. What does DevOps mean to you and what is its purpose in our organization?**

### **Sample Answer:**

DevOps is all about facilitating a stronger alignment between IT and the business as a whole. This is achieved by working with IT developers to ensure effective coordination and integration between business operations, development and testing. DevOps, to me, is about improving organizational culture



by implementing the right infrastructure and using the right tools to achieve the strategic goals of the business.

## **Q10. Tell me how DevOps differs from Agile / SDLC?**

### **Sample Answer:**

I like to think of DevOps as a culture. That is, it is a culture of all teams collaborating together; both the development teams and operations teams. This collaboration means continuous development, feedback, improvements, and high-quality deliverables can be made swiftly and efficiently. Agile is an interactive framework, with qualities like those I have already mentioned such as the collaboration of all staff, customer feedback, on-going improvements and rapid releases of content. SDLC, or Software Development Life Cycle, focuses on ensuring the software is fully functional for the users by focussing on the design, maintenance and development workflows. Principally, Agile and SDLC are aimed at development teams, but DevOps ties everyone together collectively (both the development team and operations team) to create a more efficient workflow. Although there are often comparisons differentiating DevOps from Agile and SDLC, in reality, the Agile framework, can still be applied under the DevOps culture.

## **Q11. What is an inode on Linux?**

### **Sample Answer:**

Essentially an inode is an administrative data source that stores a file's metadata i.e., the data needed to read the file. For example, the read, write permissions, the file type, and file size etc. is stored in the inode. Every file in Linux has an inode and each inode is identified with an integer number.

## **Q12. In your opinion, which are the top DevOps tools and what are they used for?**

### **Sample Answer:**

I have worked with many DevOps tools and the ones I think are best are: Kamatera is a cloud provider that is used for the deployment of cloud applications. Kamatera is really fast and supports the most popular applications such as CPanel, NextCloud, OpenVPN, Redis, WordPress, MySQL, node.js, & phpMyAdmin. Jenkins is another DevOps tool I recommend as it's an open-source tool that big companies like LinkedIn use as an automation server. By distributing work on multiple machines and platforms, it is great for automating, building, and the deployment in projects. The other tool I feel is one of the best is Git. Git is a version control system, that in my opinion, is the best for teams with different geographical locations. Its simplicity to learn and implement by teams makes this a top DevOps tool.

## **Q13. Tell me how you'd go about optimizing a database?**

### **Sample Answer:**

When optimizing a database, there are some essential areas I would cover right away. Firstly, I would index the database. I would specifically look to index "group by", "where", and "order by" columns. This will ensure unique records, speed up select query time, and allow for better sorting. I often see too many tables used in join statements. This can cause big optimization issues, so I always look to use less than a dozen joins for each query. Another common problem database problem is too many columns. As a rule of thumb, I try to keep this down to under 100 columns and will insert logical breaks. For instance, if a customer can have multiple email addresses, I may create a separate table for email addresses that reference back to the "customer\_id". This can be a huge saver on CPU. Finally, I would ensure there are no null values (the absence of any value in a column). Null values can cause a database to not behave as intended when running queries. I would potentially define a default value if the database doesn't require a mandatory value.

## **Q14. What is garbage collection programming?**

### **Sample Answer:**

Garbage collection is memory management in software. Often referred to as just the "Collector" it will attempt to reclaim memory/garbage allocated to objects that are no longer used by the program. There are essentially three forms of Garbage Collection; Mark and sweep, Copying collection, Reference counting. Garbage collection can save time for programmers by reducing the need for many functions, but at the same time, it can be performance-intensive as it has to run regularly to check object references and clean up.

## **Q15. Talk me through the steps you would follow when checking physical memory on Linux?**

### **Sample Answer:**

The simplest way to check the physical memory on Linux server is to use the "free" command. I would do this by firstly opening the command line, and then I would type the command free followed by the byte format I would like the results displayed in such as and -g for gigabytes, or -m for megabytes. Within the results presented, I would look at the line starting with "Mem:" to see the physical memory.

## **Q16. Explain how you copy a local file to HDFS?**

### **Sample Answer:**

The easiest way to do this would be to use the command line "`hdfs dfs -copyToLocal`" followed by the name of the source and the destination. If the system uses the legacy Hadoop fs then I would use the command `hadoop fs -copyToLocal` followed by the name of the source and the destination.

## **Q17. Describe how you would make a background process run?**

### **Sample Answer:**

In Linux or Unix-like operating system, I would use the ampersand at the end of the command I use to run a job. This will tell the system to run the process in the background. For example, if I wanted to run the count programme I would enter the command `count &`.

## **Q18. Assuming there are no cookies, how would you make your application work?**

### **Sample Answer:**

By utilizing sessions in PHP a web application can still function. Although sessions do normally use cookies, they are able to operate without them. This can be done by adding a session ID tag to any HTML forms, usually PHPSESSID. For any links in the HTML code, they will need to be modified to have a GET parameter added to the link. The GET parameter will also utilize the name of the PHPSESSID. The danger of doing this however is that the sessions can be then shared - if a person shares a link for example then they will be sharing their active session which someone could use to essentially steal their identity on that application and cause damage.

## **Q19. Talk me through the process of what happens when someone accesses a URL via a web browser?**

### **Sample Answer:**

Firstly, once the URL/web address has been entered into the browser, the browser will go to the DNS server to find the IP address for the domain name. Secondly, the browser sends a HTTP request message to the server, essentially requesting the server to send a copy of the website to the browser. All data is sent via IP/TCP. Thirdly, the server then approves the request by returning a "200 OK" message and will then send across the website's files in data packets. Finally, the browser places these data packets together to render the site via HTML.

## **Q20. What is the difference between CI and CD?**

### **Sample Answer:**

Continuous Integration (CI) and Continuous Delivery (CD) are both are different stages of modern development but are very different. CI is essentially the process of inserting code into a mainline codebase – nearly always using tools designed for this purpose whereas CD is actually for the processes needed after code has been inserted. For example, testing and deploying code. It is important to note that CD processes look different depending on the project and the team. There is no one tool for this.

## **Q21. Tell me how you would measure network packet?**

### **Sample Answer:**

It's important to measure and analyze network packet loss as this is a common network performance issue. Essentially, packet loss is the number of data packets that fail to reach their destination, which I would measure by analyzing traffic data on both the sender and receiver ends. I would then determine if it was caused by software issues, router performance, or network congestion, as these are the most frequent factors for packet loss. I would measure network performance in other ways too by covering the following areas: latency, throughput, and bandwidth, jitters in addition to the four common areas that impact network performance: infrastructure, applications, network issues, and security issues.

## **Q22. What is a distributed cache in Hadoop?**

### **Sample Answer:**

Distributed cache in Hadoop allows the copying of read-only files, jar files, or archives to a node before tasks are executed on that node. This way, it is possible to access files from all the nodes in a map and reduce the job. Upon successful completion of the job, the temporary/cache files are removed.

## **Q23. There are a large number of requests due to high demand. How would you ensure your database works?**

### **Sample Answer:**

One way to improve an application's performance with high volumes of traffic is to introduce *sharding*. Sharding is the partitioning of data across multiple servers. This means each database stores less information and deals with fewer requests, thus improving performance. For example, a common practice is to separate customer IDs alphabetically into different shards, we could, for example, split customer IDs A-D, E-H, I-L, etc. into different shards. A potential downside to this method is the unbalance of data in each shard – we could see many more customers that have IDs between A-D than I-L, for example. Therefore, I would always analyze this and test a worst-case scenario before implementing any changes. Other areas I would consider are to ensure optimal indexing is in place and to ensure the latest



version of MySQL is being used. Consideration of using a stronger CPU and SSD drive will also factor as demand increases.

## **Q24. Why do you want to leave your current job?**

### **Sample Answer:**

I want to leave my job because I am looking for a fresh challenge with a company that has exciting and ambitious plans for the future, and one that will also use my skills and DevOps technical abilities to the full. My employer has been great, and we have achieved some fantastic things whilst I have been there, but I am now ready for a new challenge as a DevOps Engineer, and I would like that challenge to be with your company.

## **Q25. What are your salary expectations in this DevOps Engineer role?**

### **Sample Answer:**

I have carried out some research in relation to the average salary for this DevOps position, and the general range is between \$90,000 and \$115,000. Whilst I do personally feel I am worth the higher end of the salary scale, I understand and appreciate I need to prove to you my worth. On that basis, I would be comfortable with a salary of \$105,000.

*NOTE:* Please conduct your own research into the general salary range for a DevOps Engineer in your area.

## **Q26. That's the end of your DevOps interview, do you have any questions for the panel?**

### **Sample Answer:**

Thank you. Yes, I do:

Q. What are the most difficult DevOps challenges you have been facing from an organizational perspective over the last 12 months?

Q. If I am successful, what would you need me to concentrate on immediately within the first few weeks of starting?

Q. Can you tell me what the culture is like within the organization?

Q. Do you have any exciting or new plans for the organization over the forthcoming 12 months that I would be involved in if I am successful?

## **How to Use These Interview Questions and Answers:**

These interview questions and answers are intended to guide you in your preparation for your job interview. These questions have been picked by the PassMyInterview team because we believe that they are the best representative of what you will face in your interview.

The sample answers in this resource are collated from years of experience and research in the recruitment sector. The answers confidently display the appropriate qualities and competencies that the interviewer expects from successful candidates.

Read the sample answers carefully, and take note of what skills and competencies they demonstrate. You might notice that, when the question asks for examples, the answer uses the STAR method to construct the response:

**S**ituation. Start off your response to the interview question by explaining what the 'situation' was and who was involved.

**T**ask. Once you have detailed the situation, explain what the 'task' was, or what needed to be done.

**A**ction. Now explain what 'action' you took, and what action others took. Also explain why you took this particular course of action.

**R**esult. Explain to the panel what you would do differently if the same situation arose again. It is good to be reflective at the end of your responses. This demonstrates a level of maturity and it will also show the panel that you are willing to learn from every experience.

In order to get the best possible results, apply this system to your own examples and experiences in working life. These sample answers are intended to inspire you to create your own responses to the questions.

**Disclaimer:**

PassMyInterview is not responsible for anyone failing any part of any selection process as a result of the information contained within this resource. PassMyInterview and their authors cannot accept any responsibility for any errors or omissions within this resource, however caused. No responsibility for loss or damage occasioned by any person acting, or refraining from action, as a result of the material in this publication can be accepted by PassMyInterview.

Get more guides, books and training courses at the website [www.How2Become.com](http://www.How2Become.com).

Copyright © PassMyInterview.com. All Rights Reserved. For personal use only.

Order ID: 0023919