



## ROLE DESCRIPTION

<b>ROLE TITLE</b>	<b>Solutions DevOps Engineer</b>
<b>COMPANY</b>	<b>TerraQuest Solutions Limited</b>
<b>DEPARTMENT</b>	<b>Solutions</b>
<b>REPORTS TO</b>	Head of <b>Infrastructure</b>

### ROLE PURPOSE

TerraQuest are looking for someone to join our growing business as a DevOps Engineer to join their growing ICT and DevOps team. You will be working with other DevOps engineers and software developers to improve the company DevOps culture while supporting our cloud based infrastructure, and influencing the software development lifecycle. You must be a strong team collaborator and comfortable sometimes working autonomously.

TerraQuest are middle stages of a digital of a large digital transformation programme and we are planning to further expand this year, continuing to deliver forward-thinking, best-in-class solutions for our existing and new client base.

Working alongside others within the Solutions team and across the transformation roadmap you **will** enable the business to implement the changes to our software delivery processes needed that will drive forward this strategic initiative. The TerraQuest Solutions team is aggressively adopting new technologies and architectural principles, as well as approaches to delivery, deployment, scalability, monitoring and **security**.

The successful candidate is expected to be a strong technologist, with both software engineering and technical operations backgrounds. You will be observant, have good attention to detail, and will be able to communicate with clarity and confidence when interacting with Solution Architects, Product Owners, QA analysts, UX designers and developers. You will be capable of implementing design specification and visual standards on different platforms.

## **PRINCIPAL ACCOUNTABILITIES**

*List main accountabilities in order of importance that this role needs to do to ensure the role purpose is met. Outline what is done, to what, to achieve what.*

1. Technical ownership of DevOps and CI/CD initiative and configuration management.
2. Working closely with the development, Cloud Engineers, Operations, Security and Architects to build and maintain the Application deployment and to ensure all solutions are Secure by Design and Secure in Practice.
3. Responsible for ensuring that Design principles and development best practices are adapted to develop the Code.
4. Should be acting as a master trouble shooter and SME
5. Create and maintain the documentations for knowledge sharing and training
6. Support the DevOps and Cloud adoption to application development (Solutions) team and review current and proposed architecture and design deliverables and support as the SME for DevOps, DevSecOps, CI/CD and cloud adoption.
7. Work with business stakeholders to identify strategic DevOps adoption and automation requirements
8. Executes POCs and feasibility studies to validate next-gen product concepts and technologies leveraging results to guide business and technology decisions.
9. Work with Scrum masters and product owners and other functional teams to translate the roadmap into releases
10. Keep abreast of and gain expertise in the evolving technology and understand how new technologies could be applied to our Cloud estate.

## About you

We are interested in speaking to DevOps specialists with experience of:

1. Cloud technologies: Azure, AWS or GCP
2. Building and implementing CI/CD Pipelines, experience working with repos, build automation tools, build orchestration and environment automation.
3. Implementing microservices and containers E.g. Kubernetes, Docker, OpenShift
4. Implementing tools for logging, monitoring and alerting. E.g. TICK Stack, ELK Stack, Splunk, CloudWatch
5. Creating and automating virtual machines in the cloud deployed on compute instances.
6. Implementing other cloud infrastructure and networking required to host a digital service, including storage, firewall and network configuration.
7. High availability, business continuity and disaster recovery solutions in the cloud.
8. Deploying serverless functions E.g. AWS Lambda, GCP Cloud Functions, Azure Cloud Functions.
9. Working knowledge of OS including CLI experience, deploying and configuring application or web servers in virtual machines. E.g. Linux, Tomcat, JBoss, Windows Server, IIS.
10. Solving environmental and configuration issues across the stack.
11. Application of operational process, such as, patching strategies and dependency management of environments and virtual machines.

## COMPLEXITY, PLANNING AND TIME SPANS

*Specify the areas over which this role has management responsibility.*

- Own workload planning, specific to the management, setup and support of infrastructure requirements for against assigned projects.
- Ownership of environments that have CI/CD capabilities and; responsibility of configuring them to the required standard and maintaining them against changed requirements and/or functionality.

*What time spans does the role operate under*

- Full Time permanent
- Agile Working Model

## DIFFICULTIES AND DEMANDS OF THE ROLE

*What are the most difficult parts of the job?*

- Becoming an advocate for DevOps across the business and messaging the transition as an evolution of current development practices rather than a revolutionary change within the business

*What are the typical types of problems and challenges?*

- Moving legacy infrastructure to microservices whilst balancing legacy technology needs with requirements for greenfield projects.

*How will these be resolved*

- Foundations of automation, configuration management and continuous delivery will be put in place to be able to cope with the increased operational workloads that microservices bring.

## TYPICAL DECISIONS MADE BY THE JOBHOLDER

*List 2 examples of decisions the jobholder can take*

- Selection of DevOps tools or packages for use across the business
- Upon the structure of workflow processes that will need to be implemented in workflow management tool (Azure DevOps)

*List 2 examples of when decisions must be referred to the immediate manager or others.*

- Approval of environment may need to be sought through project board or Technical Design Authority
- Integral components of solutions will need to be reviewed and approved by Solution or Enterprise Architect to ensure components are aligned with business and product strategic goals.

## FACTS AND FIGURES

*Detail the main variables against which the role will be measured. These variables can include sales targets, costs, profits, turnover, etc.*

### Principal Measures

Frequency of deployment (how often new features or capabilities are launched). To be measured on a daily or weekly basis.

Deployment times post approval

Failed deployment rate – frequency of post deployment outages or other issues.

Mean time to recovery (MTTR) an essential metric that indicates your ability to respond appropriately to identified issues. Time taken to address problems that have arisen due to failed deployments

## PERSON SPECIFICATION

*Attributes against which candidates will be recruited.*

	<b>Essential</b>	<b>Preferred</b>
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>A relevant Information Technology tertiary qualification or Microsoft Certifications</li> </ul>	BSc in Technology subject
<b>Experience</b>	<ul style="list-style-type: none"> <li>Minimum 5 years' experience in the Information Technology industry using Microsoft Technologies or equivalent</li> </ul>	<ul style="list-style-type: none"> <li>Working knowledge of OS including CLI experience, deploying and configuring application or web servers in virtual machines. E.g. Linux, Tomcat, JBoss, Windows Server, IIS.</li> <li>Solving environmental and configuration issues across the stack.</li> <li>Application of operational process, such as, patching</li> </ul>

	<b>Essential</b>	<b>Preferred</b>
		<p>strategies and dependency management of environments and virtual machines.</p> <ul style="list-style-type: none"> <li>•</li> </ul>
<b>Skills &amp; knowledge</b>	<ul style="list-style-type: none"> <li>• In depth knowledge and experience of architecture, securing, scaling and administering cloud based solutions in Microsoft Azure (or AWS), utilising IaaS or PaaS based services.</li> <li>• Building and implementing CI/CD Pipelines, experience working with repos, build automation tools, build orchestration and environment automation is very interesting. E.g. Jenkins, GIT, SVN, CVS, Cloud-Formation, Terraform, Chef, Ansible, Puppet, Code Pipeline, Azure Stack</li> <li>• Experience debugging a complex, multi-server service in a high availability production environment.</li> <li>• Experience of building and optimising deployment pipelines and</li> </ul>	<ul style="list-style-type: none"> <li>• Experience with setting up detailed monitoring, logging and alerting by design with time series based tools.</li> <li>• Experience of Containerisation with tools such as Docker and Kubernetes.</li> <li>• Experience using scripting languages or a high level programming language such as C#.Net.</li> </ul>

	<b>Essential</b>	<b>Preferred</b>
	deployment strategies on popular CI/CD tools.	
<b>Other attributes</b>	<ul style="list-style-type: none"> <li>• Strong communication skills; with the ability to convey complex technical concepts clearly and concisely.</li> </ul>	<ul style="list-style-type: none"> <li>• Highly self-motivated and driven.</li> <li>• Ability to solve problems quickly and completely</li> <li>• Ability to multi-task and stay organised in a dynamic work environment.</li> <li>• Passionate about Software Development, with a general thirst for digital knowledge and an interest in new emerging technologies.</li> <li>• Analytical and inquisitive, with excellent attention to detail.</li> <li>• Innovative and creative, with a concise, precise and effective approach to problem solving</li> </ul>

	<b>Essential</b>	<b>Preferred</b>
		<p>and the ability to develop, deliver and evaluate brilliant ideas founded on rock-solid strategic thinking.</p> <ul style="list-style-type: none"> <li>• Reliable, flexible and cooperative.</li> <li>• Diplomatic and tactful.</li> <li>• Personable and approachable, with an enthusiastic and motivational nature and an overall passion for excellence.</li> </ul>