# DevOps: Containerization & Infrastructure (DO1) Exam Blueprint

You will be working remotely in a virtualized controlled environment

You are expected to demonstrate your knowledge gained during the course by utilizing the technologies studied to the level covered

You will be asked to perform a set of tasks taken from the following categories \*

### Virtualization and Vagrant

* Using **Vagrant** to manage single- and multi-node environments
* Creating and modifying **Vagrantfile** for single- and multi-node environments
* Using **Vagrant** for virtual machine configuration and provisioning

### Containerization

* Installation and configuration of **Docker** and **Podman**
* Deploying **Docker Swarm**
* Pulling, exploring, and removing images
* Starting, stopping, and removing containers
* Creating your own images (incl. with **Dockerfile**)
* Working with networks and volumes
* Working with stacks and services

### Infrastructure as Code

* Installation and configuration of **Terraform**
* Creating basic to intermediate configuration solutions against **Docker**, **VirtualBox** or other local providers
* Being able to implement basic provisioning

### Configuration Management

* Installation and configuration of **Ansible**
* Using the tool in standalone mode
* Creating basic to intermediate configuration solutions that may be executed against multiple machines
* Being able to use it in combination with infrastructure management tools like **Vagrant** and **Terraform**

\* Please note that some of the listed topics may remain outside the scope of the actual exam. The exam challenge is not architected to cover every possible topic and technology