

# General Description

Skill 53 – Cloud Computing

## 1 Introduction

This document describes the ICT Regional Championships 2024 in the category “Cloud Computing”, also known as skill 53. This competition is the successor of the previous skill 39 and is mainly focused on the usage of public cloud services.

The competition will be divided into several smaller tasks, for which you will have a total of **three hours** to complete as many tasks as possible. The tasks are mostly independent of each other, allowing you to solve them in the order of your liking. You can freely switch forth and back between tasks as well, letting you tackle a different challenge should you end up being stuck with an issue.

The competition is being hosted on a custom-made platform which grants you access to a temporary account for the AWS cloud platform and provides you with real-time marking insights. You can immediately see if you are doing things right, how your current score is and have the option to obtain some hints.

The scope of the competition is mostly limited to infrastructure-related services on AWS, e.g. EC2 (their VM hosting), Auto Scaling, CloudFront (CDN), RDS (MySQL / Postgres in the Cloud), etcetera. Some basic Linux knowledge might also prove useful for certain EC2-related tasks, but the core focus will be mainly on AWS and its services.

You will be provided with a specific list of services as part of the upcoming job description earlier next year. This list will mention each AWS service with their name and, in case of very complex services, a rough outline of its scope.

Additionally, it is planned to provide you with the possibility to register for a demo / trial account on your competition platform somewhere within January, allowing you to access a couple previous challenges and complete them at your own pace. This makes it possible for you to discover how the cloud skill works, what you can expect and how the marking works.

An important part of this competition is that all internet access is allowed, but you must NOT use any kind of outside help. You do not have to memorize domain-specific knowledge and can instead focus on the bigger picture.

## 2 Bring your own device

As a competitor, you must bring your own device to the competition, unless your regional school/location tells you otherwise. Due to the usage of public cloud services, specifically AWS, the requirements are very simple and easy to fulfill.

Basically, you only need to have a working email address, a web browser of your choice and optionally an SSH client like OpenSSH or PuTTY. No other software is required, and you also do not need to run any virtual machines on your system, as everything is hosted in the cloud.

On the competition day you will receive individual details for signing into a challenge platform where the competition is being held. You will find all the required information and credentials there along with the specific tasks and your current score. When logging in for the first time, you will be asked to fill in some details about yourself like your full name, school, and employer. Please make sure that the provided data is correct, as it will be used as part of the ranking.

Aside from that, there are no restrictions imposed regarding the kind of tools you may use. By default, you will be automatically logged into a temporary AWS account where you can solve the various tasks within your browser. Additionally, you will also have the possibility to get a temporary token for using the AWS CLI, although this is neither required nor recommended unless you already have some good knowledge.

## 3 Rules

Please be aware of the following competition rules to guarantee a fair experience for every participant:

- The competition has a fixed start and finish time. It is up to yourself to decide how to divide your time. Your score is being continuously graded and you do not have to submit any results at the end of the competition.
- Due to the competition allowing for BYOD (bring your own device), this exam is meant to be treated as open book, meaning that all resources including the internet are allowed.
- You are NOT allowed to communicate with other people, including fellow candidates. Any kind of outside help will result in your immediate disqualification from the competition.
- You may not disclose any competition material or information to any other person, neither before, during nor after the competition.

## 4 Training

For this year's regional championships, there are two different ways of training planned, both which will be released during January 2024:

- A demo account for our competition platform, which allows you to work on some of the previous challenges at your own pace, with multiple attempts and real-time marking.
- An account for AWS Academy, a learning platform provided by AWS for either following an interactive course or experimenting around in a sandbox account, which has 100\$ of credits and can be used to your liking.

If you are interested in obtaining either of these two training methods, please fill out the following form with your contact information, which will let us reach out to you once the materials are ready.

**Request for Training:** <https://forms.gle/dZ2vkZnBtH7tqWTW9>

All training materials are offered for free and come with no additional cost for you. Due to the nature of how these training materials are provided, you will also not be required to provide any form of billing information, unlike with actual real-world accounts at public cloud services.

## 5 Remarks

Details for Fairness etc. see in the [General-Information](#)s for the ICT Championships.