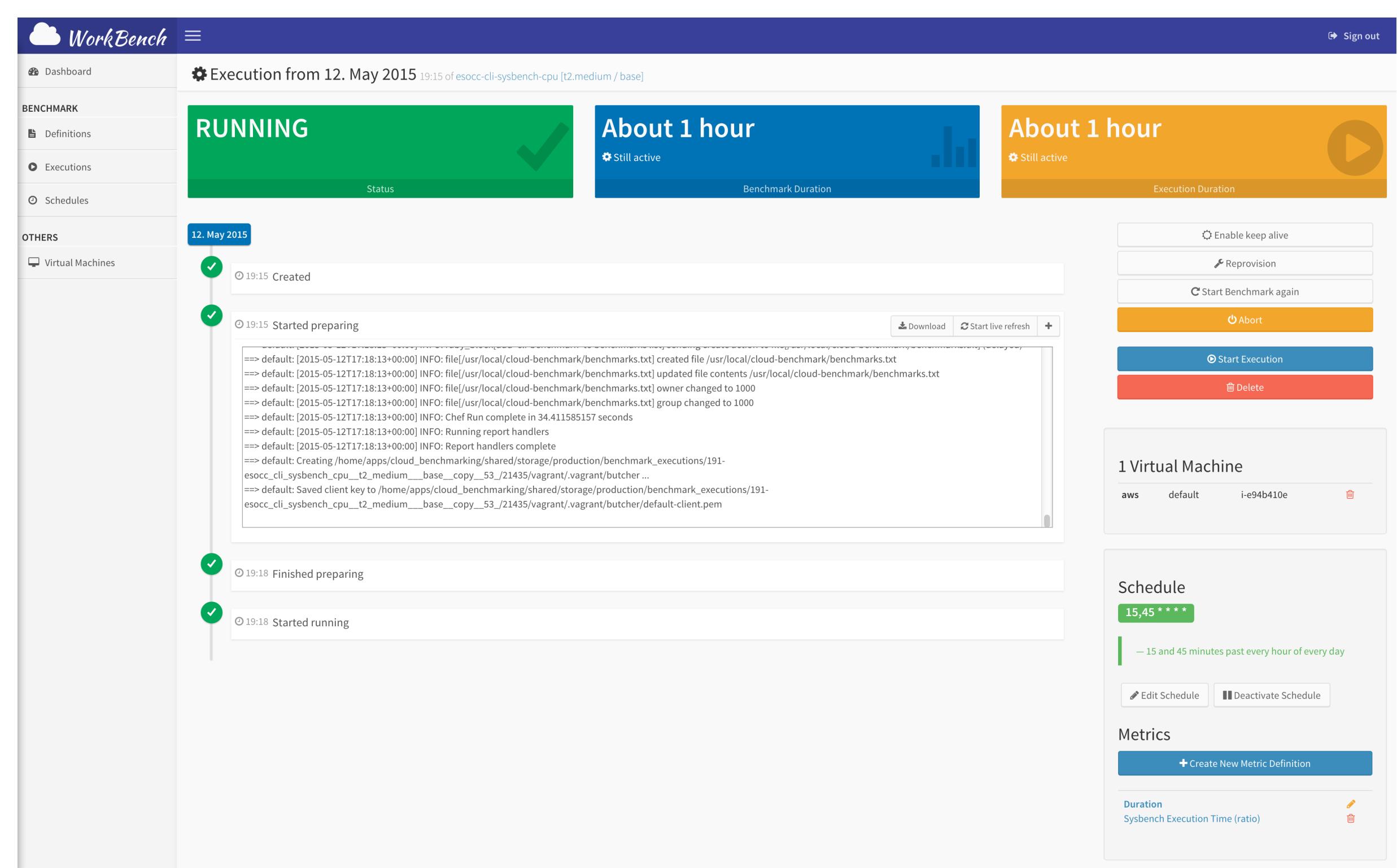




s.e.a.l. – software evolution and architecture lab
Department of Informatics, University of Zurich, Switzerland

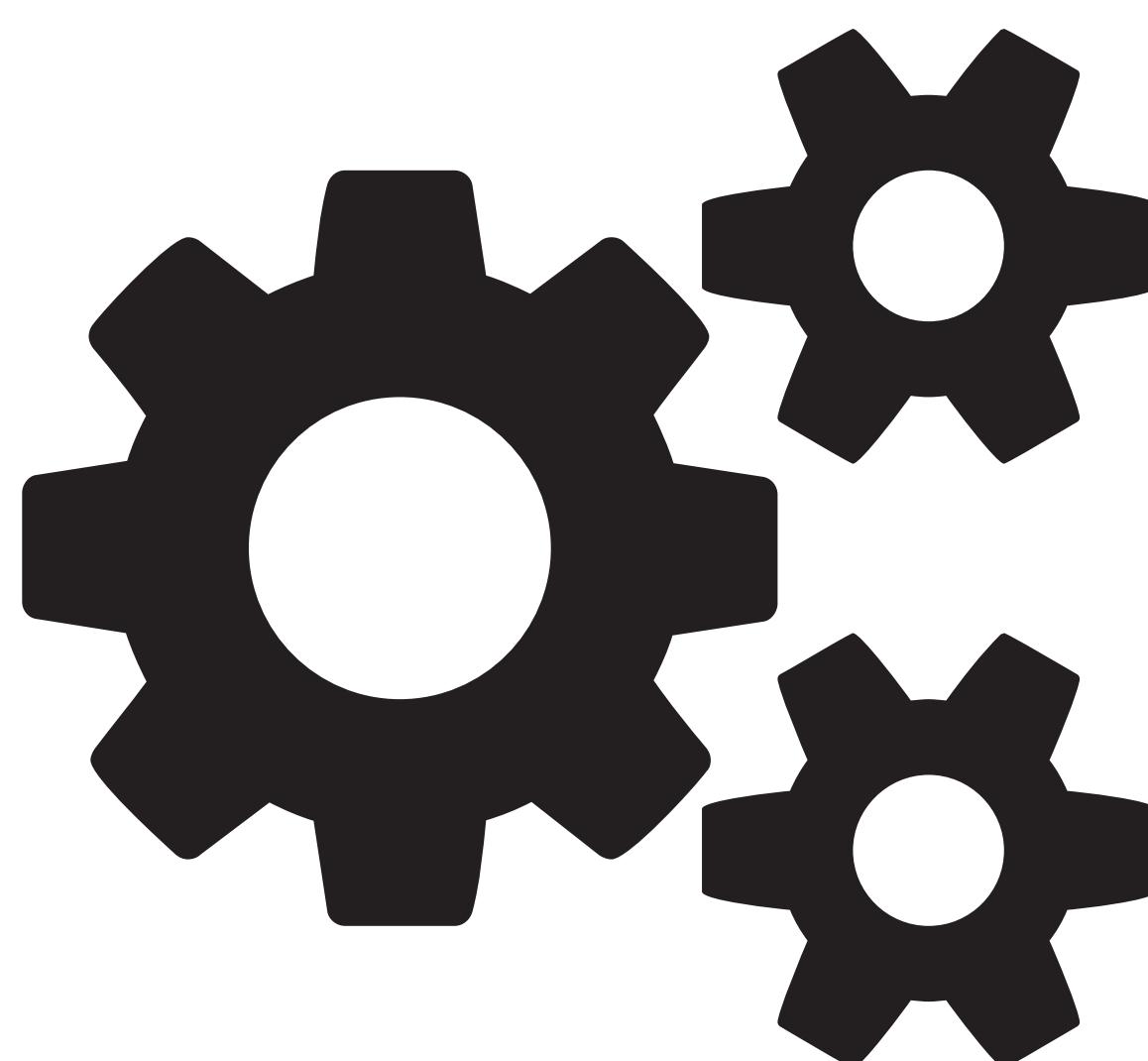
Cloud WorkBench: Benchmarking IaaS Providers based on Infrastructure-as-Code

Cloud WorkBench



The screenshot shows the Cloud WorkBench dashboard for a running benchmark. It displays the status as 'RUNNING' with a green checkmark, indicating it has been active for about 1 hour. The execution duration is also shown as about 1 hour. The interface includes a log viewer showing command-line output, a schedule section with a cron-like expression (15,45 * * * *), and a metrics section with a graph.

automates



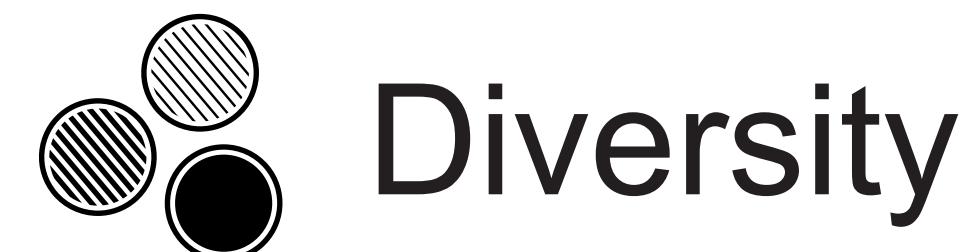
Benchmarking



IaaS Cloud Providers

Motivation

Cloud Benchmarking Challenges



Diversity
Many providers
and services



Evolution
Service characteristics
change over time

Manual Benchmarking is Hardly Feasible

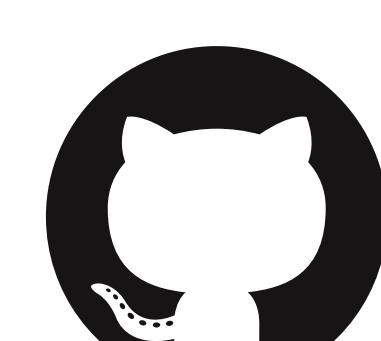
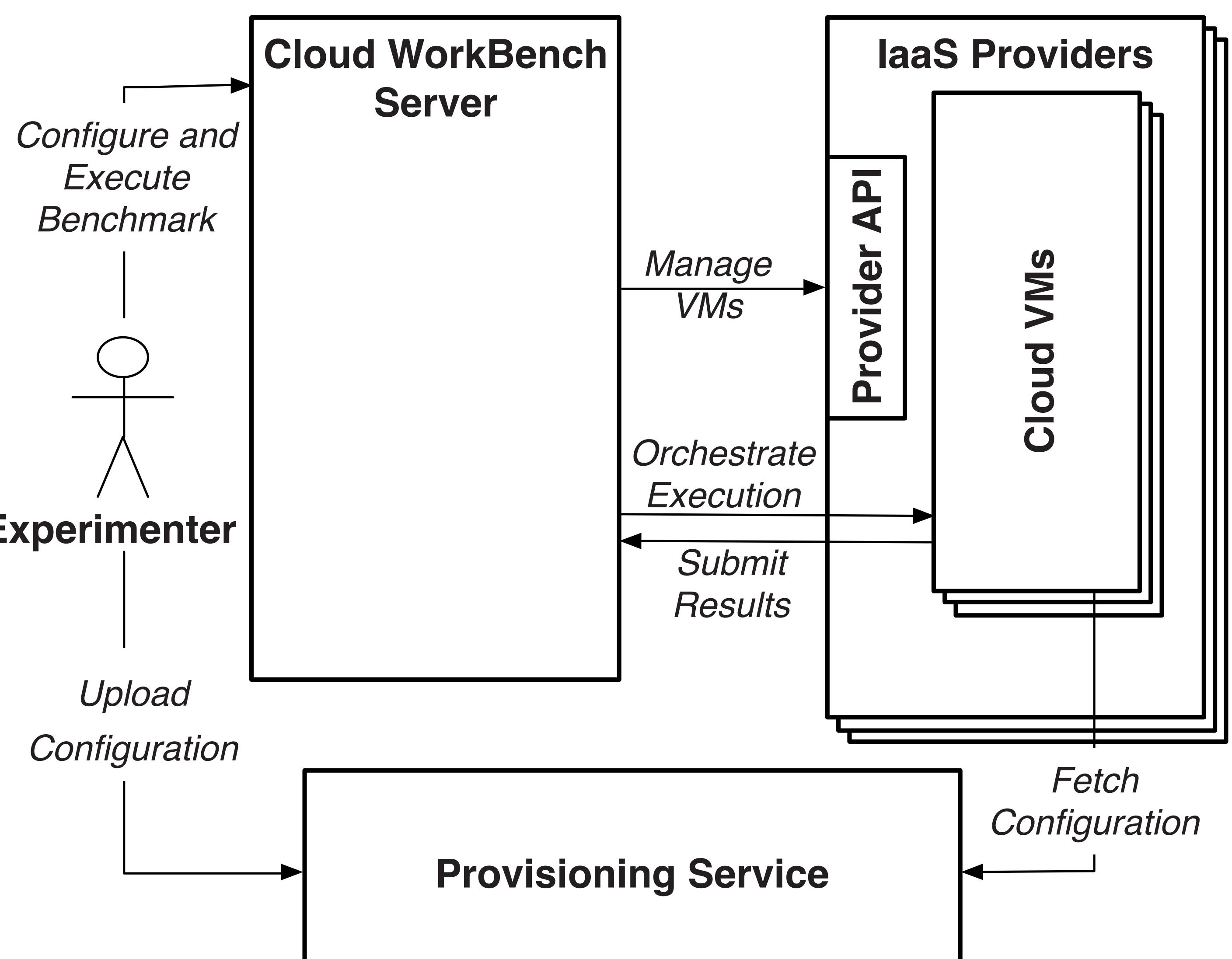


Time-consuming
Periodic and
parallel



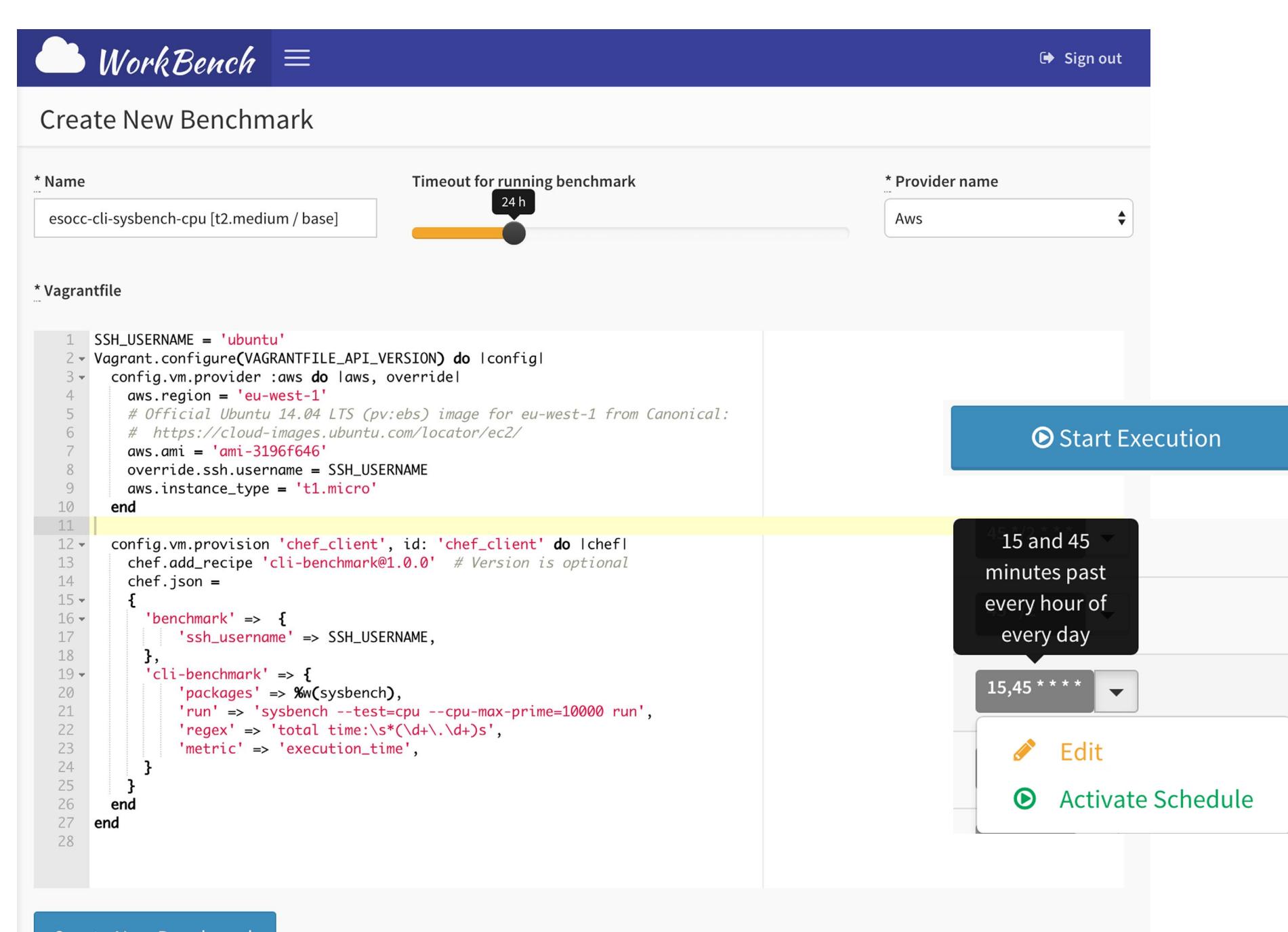
Error-prone
Threatens
reproducibility

Architecture Overview



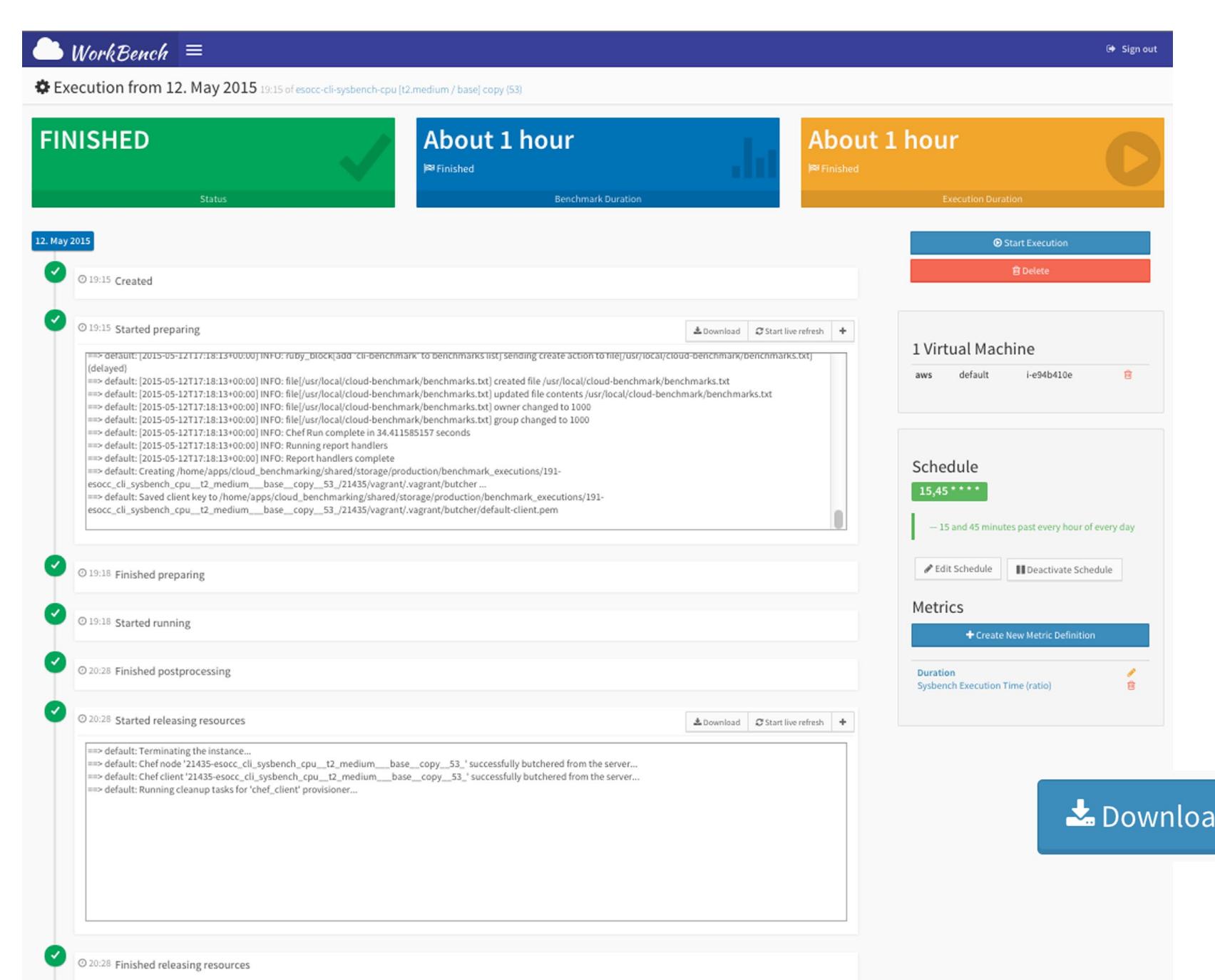
<https://github.com/sealuzh/cloud-workbench>

Definition



The screenshot shows the 'Create New Benchmark' page. It includes fields for 'Name' (esocc-cli-sysbench-cpu t2.medium / base), 'Provider name' (Aws), and a 'Timeout for running benchmark' slider set to 120 minutes. Below these are configuration snippets for Vagrant and Chef. A 'Start Execution' button is visible at the bottom.

Execution



The screenshot shows the 'Execution' view for a finished benchmark. It displays the status as 'FINISHED' with a green checkmark, indicating the execution took about 1 hour. The interface shows a log viewer with command-line output, a schedule section with a cron-like expression (15,45 * * * *), and a metrics section with a graph.

Metrics

