Distributed Cloud Scheduler

Anthony Allan (45634963),Chaz Lambrechtsen (45426317), Michael Thygesen (45207275)

# 1 Table of Contents

[**1 Table of Contents**](#_lgk38c545adh)1

[**2 Introduction**](#_rexb6bh89bpc)1

[**3 System overview**](#_zwq8dxjeh9o)1

[**4 Design**](#_r486w6oh5avf)2

[**5 Implementation**](#_nneh6p1ht2yy)2

[**6 References**](#_pq7qcq4szrh9)2

# 2 Introduction

Stage 1 of this project is to design and develop a client-side simulator for basic scheduling and dispatching of jobs. The jobs are provided to the client via the ds-sim protocol in plain text from the server-side simulator. The client will then dispatch the jobs to the largest available server.

This client will follow the structure and communication format as shown in ds-sim user guide [2] section 6 “ds-sim communication protocol”. The client will behave similarly to the given pre-compiled ds-sim-client [3].

# 3 System Overview

System overview (½ page): high-level description of the system (both client-side simulator and server-side simulator with the focus being your client-side simulator), preferably, with a figure (your own, not one in ds-sim User Guide) showing the workflow/working of the system.

# 4 Design

Design (1 page): design philosophy, considerations and constraints, functionalities of each simulator component focusing on the client-side simulator.

# 5 Implementation

Implementation (2 pages): brief description of any implementation specific information including technologies, techniques, software libraries and data structures used. How each of components/functions of your simulator is implemented including who oversees which function(s) and how they have led the design and development.

# 6 References

[1] <https://github.com/CazDev/Distributed-Cloud-Scheduler>

[2] [https://github.com/distsys-MQ/ds-sim/blob/master/docs/](https://github.com/distsys-MQ/ds-sim/blob/master/docs/ds-sim_user-guide.pdf) (ds-sim user guide)

[3] <https://github.com/distsys-MQ/ds-sim/blob/master/src/pre-compiled/ds-client>