CloudSim Setup Guide

Introduction

This guide provides step-by-step instructions for setting up CloudSim in the Eclipse IDE for your project. CloudSim is a framework for modeling and simulating cloud computing infrastructures and services.

Prerequisites

• Eclipse IDE is required to use CloudSim.

Step 1: Installation of Java

Make sure Java is installed on your system. Follow these steps:

- 1. Open a command prompt and check if Java is installed by running the command: java -version.
- 2. If Java is not installed, download it from <u>Oracle's official website</u> according to your system architecture (32-bit or 64-bit).
- 3. Install the Java setup.
- 4. Set the PATH variable for Java:
 - Copy the bin folder path from your Java installation directory (e.g., C:\Program Files\Java\jdk-19\bin).
 - o Open System Properties -> Advanced -> Environment Variables.
 - o In the "System variables" section, find the "Path" variable, click "Edit," and add a new entry with the copied bin path.

Step 2: Download CloudSim and Additional JARs

- 1. Download CloudSim 3.0.3.zip from CloudSim Releases.
- 2. Download Apache Commons Math 3 JAR (version 3.6.1) from Mayen Repository.

Step 3: Eclipse IDE Installation

- 1. If you have installed a 64-bit Java, download 64-bit Eclipse; otherwise, download 32-bit Eclipse.
- 2. Download Eclipse IDE from Eclipse Downloads.

Step 4: Run CloudSim in Eclipse

- 1. Extract the contents of the CloudSim 3.0.3.zip file.
- 2. Copy the commons-math-3-3.6.1.jar file into the "jar" folder of the CloudSim 3.0.3 directory.
- 3. Open Eclipse and create a new Java project, referencing the CloudSim 3.0.3 folder.
- 4. You are now ready to develop and run your CloudSim-based project in Eclipse.

Remark: You have successfully set up CloudSim in the Eclipse IDE. Follow these steps to ensure a smooth development experience for your cloud computing simulation project.