

JMeter CLI - Automated Performance Testing

Overview

The ****JMeter CLI**** is an automation tool designed to streamline the execution of JMeter scripts. It provides a command-line interface for running performance tests, managing configurations, and generating detailed test reports.

Key Features

- Easy selection of test modules and sub-modules.
- Configurable user input for performance parameters like number of users, ramp-up period, and loop count.
- Automated result generation in CSV and HTML formats.
- Flexible directory structure for scripts, data files, and output files.

Directory Structure

Here's the organized structure of the JMeter CLI:

```
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├── config.json # Configuration file for script paths and settings
├── datafiles/ # Directory containing input CSV files for JMeter scripts
├── jmeter-scripts/ # Directory containing JMeter (.jmx) scripts
├── output_files/ # Directory for storing test output (CSV/HTML)
│   ├── CSV Output/
│   └── HTML Output/
├── run.mjs # Main CLI script for automation
└── docs/ # Learning and reference materials for JMeter
```

Installation

Install the CLI globally via [npm](https://www.npmjs.com/) to make it available as a command-line tool:

```
```bash
npm install -g jmeter-cli
```

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## Configuration

The `config.json` file defines server settings, script paths, and data file mappings. Below is an example:

```
{
 "server_ip": "<your_server_ip>",
 "scripts": [
 {
 "name": "Client",
 "scriptPath": "jmeter_scripts/client.jmx",
 "csvFileName": "client.csv"
 },
 {
 "name": "Corporate Events",
 "subScripts": [
 {
 "name": "Equity Rights",
 "scriptPath": "jmeter_scripts/corporate_events/equity_rights.jmx",
 "csvFileName": "corporate_events/equity_rights.csv"
 }
]
 }
]
}
```

- **server\_ip**: Replace with the IP of the target server.
- **scriptPath**: Path to the `.jmx` file.
- **csvFileName**: Input file used by the script.

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## Usage

Run the CLI using the `jmeter-cli` command:

1. Start the CLI:

```
jmeter-cli
```

2. Follow the prompts:

- **Select a module**: Choose a main test script.
- **Select a sub-script** (*if applicable*).
- **Enter test parameters**: Number of users, ramp-up period, and loop count.

3. The CLI runs the JMeter test and generates output files in the `output_files/` directory.

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## Example

```
jmeter-cli
```

### Prompt Interaction:

1. Select a module: **Report Dashboard**
2. Select a sub-module: **Report Dashboard - PowerBI**
3. Enter the number of users: **100**
4. Enter the ramp-up period: **60**
5. Enter the loop count: **10**

### Output:

- CSV file: **output\_files/CSV Output/Report Dashboard/Report Dashboard - PowerBI\_2025-01-12.csv**
- HTML file: **output\_files/HTML Output/Report Dashboard/Report Dashboard - PowerBI\_2025-01-12.html**

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## Dependencies

This CLI uses the following packages:

- **chalk**: For styled terminal output.
- **inquirer**: For interactive prompts.
- **cheerio**: For parsing JMX files.
- **ora**: For loading spinners.

Install dependencies:

```
npm install
```

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## Contributing

We welcome contributions! If you have ideas or bug fixes, please submit a pull request or open an issue.

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Suggestions or changes you'd like in this?