

SSJ

SSJ (Scontrol Show Job) is a Python-based CLI utility that enhances the readability and interactivity of SLURM job inspection.

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SSJ (Scontrol Show Job) is a Python-based CLI utility that enhances the readability and interactivity of SLURM job inspection. It provides a user-friendly terminal interface to display SLURM job details with optional filtering, formatting, file inspection, and JSON export.

Ideal for HPC users who frequently monitor job metadata, logs, or scripts via `scontrol`.

Installation

You can install this CLI tool using `uv` in two different ways:

A. Install directly from GitHub (recommended)

```
uv tool install git+https://github.com/rice8y/ssj.git
```

This will fetch and install the latest version directly from the repository.

B. Install from a local clone

1. Clone the repository:

```
git clone https://github.com/rice8y/ssj.git
```

1. Move into the project directory:

```
cd ssj
```

1. Install the package in editable mode using `uv` tool:

```
uv tool install -e .
```

This is useful if you plan to modify the code locally.

Usage

SSJ fetches detailed SLURM job metadata using `scontrol show job <jobid>`, and presents the data in rich tables or JSON format. You can also inspect the job's associated script, stdout/stderr logs, or working directory.

Example

```
ssj 123456
```

This command displays a formatted table with all metadata for job 123456.

Options

- `-f, --fields <KEYS>`: Show only specified fields (partial, case-insensitive match allowed)
- `-g, --grep <PATTERN>`: Filter fields using a regex pattern
- `-j, --json`: Output raw JSON instead of a table
- `--script`: Show job script contents
- `--stdout`: Show stdout log contents
- `--stderr`: Show stderr log contents
- `--files`: List job-related file paths and their existence
- `--lines <N>`: Show only first N lines of a file (used with `--script`, `--stdout`, `--stderr`)
- `--tail`: Show last N lines instead of first N (requires `--lines`)

Example with options

```
ssj 123456 --fields starttime --grep time
```

Displays job 123456 fields related to timing.

```
ssj 123456 --stdout --lines 20 --tail
```

Shows the last 20 lines of the job's stdout log.

```
ssj 123456 --files
```

Lists script, stdout, stderr, and working directory paths associated with the job, and whether they exist.

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