



# POSIX-Nexus: Enhancing POSIX Shell Performance

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October 25, 2024

## Abstract

POSIX-Nexus aims to enhance the performance of the POSIX shell by leveraging the processing capabilities of POSIX `awk` and `sed` backends. This document provides an overview, usage instructions, and contribution guidelines.

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# 1 Introduction

POSIX, which stands for Portable Operating System Interface, is a set of standards specified by the IEEE to ensure compatibility and portability across different operating systems.

## 2 About This Codebase

This codebase aims to enhance the performance of the POSIX shell by offloading data manipulation tasks to powerful utilities like `awk`, `sed`, and `c90`.

### 2.1 Key Features

- **Compatibility:** Adheres to POSIX draft 1003.2 (draft 11.3) standards.
- **Performance:** Utilizes `awk`, `sed`, and `c90` for backend processing.
- **Portability:** Scripts are designed to be portable and easily integrated into different environments without modification.

### 3 Usage

Ensure your environment supports POSIX-compliant `awk` and `sed`. Detailed usage instructions and examples can be found in the `docs` directory.

## 4 Contribution Guidelines

We welcome contributions from the community to help improve the project. Here are some guidelines to help you get started:

### 4.1 Reporting Issues

If you encounter any issues or have suggestions for improvements, please open an issue on our GitHub Issues page. Provide a clear and descriptive title, detailed description, steps to reproduce the issue, and any relevant logs or screenshots.

### 4.2 Tool Restrictions

To maintain compatibility and portability, it is prohibited to use any tools not explicitly required by POSIX. Ensure your scripts and contributions adhere strictly to POSIX standards.

### 4.3 Testing

Before submitting your pull request, please ensure your changes do not break existing functionality. Include tests for your changes if possible.

### 4.4 Documentation

If your contribution includes new features or changes to existing functionality, please update the documentation accordingly. Documentation files are located in the `docs` directory.

### 4.5 License

By contributing to POSIX-Nexus, you agree that your contributions will be licensed under the GNU General Public License Version 3, 29 June 2007.

## 5 Submitting Pull Requests

We welcome pull requests for bug fixes, new features, and documentation improvements. Follow these steps to submit a pull request:

1. **Fork the repository:** Click the "Fork" button at the top of the repository page to create a copy of the repository in your GitHub account.
2. **Clone your fork:** Clone your forked repository to your local machine using the following command:

```
git clone https://github.com/Canine-Table/posix-nexus.git
```