

Changelog

All notable changes to the Purchase Requisition System will be documented in this file.

The format is based on [Keep a Changelog](https://keepachangelog.com/en/1.0.0/) (<https://keepachangelog.com/en/1.0.0/>),
and this project adheres to [Semantic Versioning](https://semver.org/spec/v2.0.0.html) (<https://semver.org/spec/v2.0.0.html>).

[3.0.0] - 2025-01-06

Initial Release

Complete purchase requisition management system with full workflow support.

Added

- Multi-level Approval Workflow
 - Initiator → HOD → Finance → MD → Procurement flow
 - Role-based access control
 - Real-time status updates
- User Management
 - User authentication with JWT
 - Password hashing with bcrypt
 - Refresh token support
 - Role-based permissions (Admin, MD, Finance, Procurement, HOD, Initiator)
- Budget Management
 - Department budget tracking
 - FX rate management (ZMW/USD)
 - Budget balance calculations
 - Real-time budget status
- Quotes & Adjudication
 - Support for 3 vendor quotes
 - Comparative analysis
 - Adjudication workflow
 - Justification for vendor selection
- Purchase Orders
 - PO generation from approved requisitions
 - Sequential PO numbering
 - Delivery tracking
 - Invoice management
- Analytics & Reporting
 - Dashboard with key metrics
 - Requisition status analytics
 - Budget utilization reports
 - Department-wise analysis
 - Excel report generation
 - PDF report generation
- Document Management
 - File upload support
 - Attachment storage
 - Vendor document management
- PDF Generation
 - Requisition PDFs
 - Purchase Order PDFs
 - Custom report PDFs
 - Professional formatting with logo
- Security Features
 - Rate limiting
 - Input validation
 - SQL injection prevention
 - XSS protection
 - CSRF protection
 - Secure password storage
- Logging & Monitoring
 - Winston logging
 - Request logging
 - Error tracking
 - Audit trail

Technical Details

- **Backend:** Node.js, Express.js, SQLite
- **Frontend:** HTML, CSS, JavaScript
- **Authentication:** JWT tokens
- **Database:** SQLite with proper indexing
- **File Storage:** Local filesystem
- **PDF Generation:** PDFKit
- **Excel Generation:** ExcelJS

Documentation

- User guides
- Admin console guide
- API documentation
- Workflow diagrams
- Troubleshooting guide
- Security documentation

How to Use This Changelog

When Adding Entries

Use these categories:

- **Added** for new features
- **Changed** for changes in existing functionality
- **Deprecated** for soon-to-be removed features
- **Removed** for now removed features
- **Fixed** for any bug fixes
- **Security** for vulnerability fixes

Version Numbers

- **MAJOR** version (4.0.0) - Incompatible API changes
- **MINOR** version (3.1.0) - New features, backwards compatible
- **PATCH** version (3.0.1) - Bug fixes

Example Future Entries

```
## [3.0.1] - 2025-01-10

### Fixed
- HOD approval comments not saving to database
- PDF generation failing for special characters
- Budget calculations rounding errors

### Changed
- Improved error messages for failed uploads
- Updated user interface colors for better contrast

## [3.1.0] - 2025-01-15

### Added
- Email notifications for approval stages
- SMS alerts for urgent requisitions
- Export to CSV functionality
- Advanced search filters

### Changed
- Redesigned dashboard layout
- Improved mobile responsiveness
```

Unreleased

Changes that are in development but not yet released.

Planned Features

- [] Email notification system
- [] SMS notifications
- [] Mobile app
- [] Offline mode
- [] Advanced analytics dashboard
- [] Integration with accounting systems
- [] Barcode scanning
- [] Inventory management
- [] Supplier portal
- [] Contract management

Support

For issues or questions:

- Check TROUBLESHOOTING.md

- Review VERSION_CONTROL_GUIDE.md
- Check Git history: git log