

CLAYS POD Order Processing & Repo Management Tool




A comprehensive web-based application for processing print-on-demand orders and managing inventory for Clays Ltd. Features complete order processing, real-time repo validation, ISBN/Master Order ID lookup, and secure repo management with password protection.

Features

Order Processing

- **Excel/CSV Upload:** Process `.xlsx`, `.xls`, `.csv` order files up to 10MB
- **Real-time Validation:** Check ISBNs against live repo database with status information
- **Smart Filtering:**
 - **Print as Miscellaneous Items (MPI):** Show only MPI status items
 - **Show Not Available Items:** Display items not found in repo
- **Bulk Operations:** Select and delete multiple rows, copy to clipboard
- **CSV Export:** Generate Clays POD-compliant CSV files
- **Template Download:** Get pre-formatted Excel template for orders

ISBN/Master Order ID Management

- **Dual Search:** Search by ISBN or Master Order ID
- **Comprehensive Results:** Shows ISBN, title, Master Order ID, and status
- **Status Indicators:**
 -  **POD Ready:** Available for print-on-demand
 -  **MPI:** Miscellaneous Print Item
 -  **Not Available:** Item not in repo catalog
- **Format Flexibility:** Accepts ISBNs with or without dashes/spaces
- **Keyboard Shortcuts:** Press Enter to trigger searches

Complete Repo Management

- **JSON-Only Upload:** Upload complete data.json format files
- **Add New Titles:** Expand repo with full data structure preservation
- **Remove Titles:** Individual or bulk removal of existing titles
- **Dual Preview:** Separate tables for additions and removals
- **Statistics Dashboard:** 6-metric real-time repo overview
- **Change Management:** Preview all modifications before applying
- **Export Options:** Download updated repo + backup current database

Security & Access Control

- **Password Protection:** Secure masked password input for repo management
- **Session Management:** 1-hour sessions with automatic extension
- **Visual Session Timer:** Real-time countdown with expiration warnings

- **Secure Logout:** One-click session termination
- **Content Security Policy:** XSS protection and resource validation
- **Input Sanitization:** Comprehensive validation of all user inputs

Requirements

Browser Compatibility

- Modern web browsers (Chrome 80+, Firefox 75+, Safari 13+, Edge 80+)
- JavaScript enabled
- File API and Clipboard API support

Required Files

```
project-root/
├── index.html           # Main application interface
├── script.js           # Enhanced application logic
├── data.json            # Repo database (required)
├── order_template.xlsx # Excel template for orders
├── favicon-32x32.png   # Favicon (optional)
└── apple-touch-icon.png # Apple touch icon (optional)
```

Repo Database Format

The `data.json` file must contain an array of book objects with the complete structure:

```
[
  {
    "ISBN": 9780140175936,
    "Master Order ID": "SA1657",
    "TITLE": "CLEOPATRA'S SISTER (11)",
    "Trim Height": 198,
    "Trim Width": 129,
    "Bind Style": "PU/2",
    "Extent": 288,
    "Paper Desc": "Holmen Bulky 52 gsm",
    "Cover Spec Code 1": "C400P2",
    "Cover Spine": 18,
    "Packing": "Pack (64) (8) Base.",
    "Status": "POD Ready"
  },
  {
    "ISBN": 9780140256932,
    "Master Order ID": "SA1659",
    "TITLE": "BEYOND THE BLUE MOUNTAINS (07)",
    "Trim Height": 198,
    "Trim Width": 129,
    "Bind Style": "PU/2",
    "Extent": 160,
```

```
    "Paper Desc": "Holmen Bulky 52 gsm",  
    "Cover Spec Code 1": "C400P2",  
    "Cover Spine": 11,  
    "Packing": "Pack (104) (8) Base.",  
    "Status": "MPI"  
  }  
]
```

Installation

Basic Setup

1. **Download** all project files to a local directory
2. **Create** `data.json` with your book repo (see format above)
3. **Place** `order_template.xlsx` in the same directory (optional)
4. **Open** `index.html` in a web browser

GitHub Pages Deployment

1. **Create** a new GitHub repository
2. **Upload** all files to the repository
3. **Enable** GitHub Pages in repository settings
4. **Access** via the provided GitHub Pages URL

Local Development Server

For local file restrictions, use a simple HTTP server:

```
# Python 3  
python -m http.server 8000  
  
# Node.js (with http-server)  
npm install http-server  
npx http-server  
  
# PHP  
php -S localhost:8000
```

Usage Guide

Getting Started

Initial Setup

1. Open the application in your web browser
2. The tool automatically loads repo from `data.json`
3. Download the order template for standardized Excel format

Default Credentials

- **Repo Management Password:** admin123
- **Session Duration:** 1 hour with automatic extension
- **Access Level:** All repo modification functions

Order Processing Workflow

1. Basic Order Processing

1. **Enter Order Reference** (required field)
2. **Upload File** with ISBN and Qty columns (Excel/CSV supported)
3. **Review Results** in the preview table with status indicators
4. **Filter Items** using available filter options:
 - **Print as Miscellaneous Items (MPI):** Shows only MPI status items
 - **Show Not Available Items:** Shows items not in repo catalog
5. **Export CSV** for Clays POD processing

2. Supported File Formats




Your order files should contain:

Column	Description	Example
ISBN	Book identifier (10-13 digits)	9781234567890
Qty	Quantity to order	5

Supported variations:

- Column names: ISBN, isbn, Qty, qty, Quantity, quantity
- ISBN formats: With/without dashes, scientific notation
- File types: .xlsx, .xls, .csv (max 10MB)

3. Status Understanding

-  **POD Ready:** Items available for print-on-demand production
-  **MPI:** Miscellaneous Print Items requiring special handling
-  **Not Available:** Items not found in current repo catalog

4. Managing Orders

- **Individual Deletion:** Click trash icon in Action column
- **Bulk Selection:** Use checkboxes to select multiple rows
- **Copy to Clipboard:** Export table as HTML for external use
- **Smart Filtering:** Focus on specific item types or statuses

ISBN/Master Order ID Lookup

Dual Search Capability

1. Enter ISBN (e.g., 9780140175936) or Master Order ID (e.g., SA1657)

2. Click "Search Repo" or press Enter
3. View comprehensive results including status

Search Results Display

- **Available Items:** Shows ISBN, title, Master Order ID, and status badge
- **Not Available Items:** Clear indication that item is not in repo
- **Auto-hide:** Success results disappear after 10 seconds

Repo Management

Access Control

1. Click "Manage Repo" in the top navigation
2. Enter password when prompted (default: **admin123**) - characters are masked
3. Access granted for 1 hour with activity extension
4. Visual session timer shows remaining time

Adding New Titles - JSON Format Only

JSON File Upload:



1. Prepare JSON file with complete data.json structure
2. Upload via "Add New Titles" panel
3. Click "Process JSON File"
4. Review in preview table with status indicators

Required JSON Format:

```
[
  {
    "ISBN": 9780140175936,
    "Master Order ID": "SA1657",
    "TITLE": "CLEOPATRA'S SISTER (11)",
    "Trim Height": 198,
    "Trim Width": 129,
    "Bind Style": "PU/2",
    "Extent": 288,
    "Paper Desc": "Holmen Bulky 52 gsm",
    "Cover Spec Code 1": "C400P2",
    "Cover Spine": 18,
    "Packing": "Pack (64) (8) Base.",
    "Status": "POD Ready"
  }
]
```

Status Indicators in Upload:

-  **New (JSON):** Valid title with complete data structure

-  **Duplicate:** Already exists in repo
-  **Invalid:** Missing required fields or malformed data

Removing Titles

Individual Removal:

1. Enter ISBN in "Search & Remove by ISBN"
2. Click search or press Enter
3. Found titles are automatically marked for removal

Bulk Removal:

1. Create file with ISBNs to remove:
 - **Text file:** One ISBN per line
 - **JSON file:** Array of objects with ISBN field
2. Upload via "Upload ISBNs to Remove"
3. Click "Process Bulk Removal"

Removal File Formats:

```
Text file:      JSON file:
9780140175936  [
9780140256932  {"ISBN": 9780140175936},
                {"ISBN": 9780140256932}
                ]
```

Preview & Management

- **New Titles Table:** Shows additions with status and individual removal
- **Removal Table:** Shows deletions with restore option
- **Statistics Dashboard:** Real-time metrics of all changes
- **Change Reversal:** Click "Restore" to undo individual removals

Exporting Updated Repo

1. **Review Changes:** Check both preview tables and statistics
2. **Backup Current:** Download current repo (recommended)
3. **Download Updated:** Get merged repo with all changes preserved
4. **Deploy:** Replace `data.json` in your GitHub repository
5. **Refresh:** Reload application to use new repo

Statistics Dashboard

The repo management interface provides six key metrics:

- **Current Titles:** Existing repo count
- **To Add:** Valid new titles pending addition

- **To Remove:** Titles marked for deletion
- **Duplicates:** Duplicate entries found in uploads
- **Final Total:** Projected repo size after changes
- **Net Change:** Overall change (+/- titles)

Configuration

Changing the Password

Step 1: Generate New Hash

Use browser console to create password hash:

```
const password = "YourNewPassword";
crypto.subtle.digest('SHA-256', new TextEncoder().encode(password))
  .then(hash => {
    const hashArray = Array.from(new Uint8Array(hash));
    const hashHex = hashArray.map(b => b.toString(16).padStart(2,
'0')).join('');
    console.log('New password hash:', hashHex);
  });
```

Step 2: Update Script

In `script.js`, find the `INVENTORY_ACCESS` object and replace:

```
const INVENTORY_ACCESS = {
  enabled: true,
  passwordHash: "your_new_hash_here",
  sessionDuration: 1 * 60 * 60 * 1000 // 1 hour
};
```

Session Management

- **Duration:** Modify `sessionDuration` (in milliseconds)
- **Disable Protection:** Set `enabled: false`
- **Warning Time:** Warnings appear 10 minutes before expiration

Customer Information

Update Clays POD details in `script.js`:

```
const customerConfig = {
  "name": "Your Company Name",
  "address": {
    "street": "Your Street",
```

```
        "city": "Your City",
        // ... other fields
    },
    "phone": "Your Phone Number"
};
```

CSV Output Format

Generated CSV files follow Clays POD specifications:

```
HDR,ORDER123,20240605,Clays POD,Clays Ltd,Popson
Street,,Bungay,Suffolk,UK,NR35 1ED,GB,01986 893 211,
DTL,ORDER123,001,9781234567890,5,,,,,,,,,
DTL,ORDER123,002,9780987654321,3,,,,,,,,,
```

Structure:

- **HDR Line:** Header with order details and Clays Ltd address
- **DTL Lines:** Detail lines with line number, ISBN, and quantity

Security Features

Content Security Policy

- Prevents XSS attacks through resource control
- Blocks unauthorized script execution
- Validates all external resource loading

Input Validation

- **File Type Checking:** Only allows specified file extensions
- **Size Limits:** 10MB maximum for all file uploads
- **ISBN Validation:** Ensures proper format before processing
- **JSON Structure:** Validates complete data.json format
- **Text Sanitization:** Removes potentially dangerous characters

Enhanced Session Security

- **Masked Password Input:** Custom dialog with hidden character input
- **Encrypted Storage:** Password hashes stored securely
- **Time-based Expiration:** Automatic logout after inactivity
- **Activity Extension:** Sessions extend with user interaction
- **Manual Logout:** Immediate session termination available

Error Handling

- **Safe Error Messages:** No sensitive information disclosure
- **Graceful Degradation:** Continues operation despite individual component failures

- **User Feedback:** Clear status messages for all operations

Troubleshooting

Common Issues

Application Won't Load

- **Browser Console:** Press F12, check Console tab for errors
- **File Location:** Ensure all files are in the same directory
- **JavaScript Enabled:** Verify browser settings allow JavaScript

"Error loading book data"

- **File Exists:** Confirm `data.json` is present
- **Valid JSON:** Check syntax with JSON validator
- **Proper Format:** Ensure array structure with complete book objects including Status field

File Upload Problems

- **File Size:** Maximum 10MB limit for all uploads
- **File Type:** For orders: `.xlsx`, `.xls`, `.csv`; For repo: `.json` only
- **Column Names:** Use `ISBN/isbn` and `Qty/quantity` for orders
- **JSON Structure:** Ensure complete data.json format for repo uploads
- **Order Reference:** Must be entered before file upload

Password/Access Issues

- **Correct Password:** Default is `admin123` (case-sensitive)
- **Masked Input:** Password characters are hidden as you type
- **Session Expired:** Re-authenticate if session timeout occurred
- **Browser Storage:** Ensure localStorage is enabled
- **Clear Cache:** Try clearing browser cache/data

Books Showing "Not Available"

- **ISBN Matching:** Ensure exact match with repo ISBNs
- **Format Consistency:** Check for leading zeros or formatting
- **Database Update:** Verify `data.json` contains expected entries
- **Master Order ID:** Try searching by Master Order ID if ISBN fails

Status Display Issues

- **Missing Status:** Items without Status field default to "POD Ready"
- **Status Values:** Valid values are "POD Ready", "MPI", or custom statuses
- **Badge Colors:** Green=POD Ready, Yellow=MPI, Red=Not Available

Download Problems

- **Pop-up Blockers:** Disable for the application domain
- **Download Permissions:** Check browser download settings
- **File System Access:** Ensure write permissions to download folder

Advanced Troubleshooting

Performance Issues

- **Large Files:** Break large uploads into smaller batches
- **Browser Memory:** Close other tabs if processing large repos
- **Network:** Ensure stable internet for CDN resource loading

Browser Compatibility

- **Modern Browsers:** Use recent versions of Chrome, Firefox, Safari, Edge
- **Feature Support:** Verify File API and Clipboard API availability
- **JavaScript Version:** Ensure ES6+ support

Security Warnings

- **HTTPS Recommended:** Use HTTPS for production deployment
- **Mixed Content:** Ensure all resources use same protocol
- **CSP Violations:** Check console for Content Security Policy errors

Maintenance

Regular Tasks

- **Repo Updates:** Keep `data.json` current with new titles and status changes
- **Password Rotation:** Change passwords periodically for security
- **Backup Data:** Regular backups of repo database
- **Library Updates:** Monitor CDN dependencies for updates

Monitoring

- **Error Logs:** Check browser console for recurring issues
- **Usage Patterns:** Monitor which features are most used
- **Performance:** Watch for slow uploads or processing times
- **Status Accuracy:** Verify status indicators match actual production capabilities

Updates

- **Dependencies:** Keep external libraries updated for security
- **Feature Requests:** Document user feedback for improvements
- **Version Control:** Use Git for tracking changes
- **Status Management:** Update status values as business requirements change

Technical Specifications

Dependencies

- **Bootstrap 5.3.2:** UI framework and responsive design
- **Font Awesome 6.4.0:** Icon library
- **SheetJS 0.18.5:** Excel file processing
- **PapaParse 5.4.1:** CSV parsing and generation

Browser APIs Used

- **File API:** For file upload and processing
- **Clipboard API:** For copy-to-clipboard functionality
- **Web Crypto API:** For password hashing
- **LocalStorage API:** For session management

Performance Characteristics

- **File Processing:** Up to 10MB files supported
- **Repo Size:** Tested with 10,000+ book entries
- **Session Duration:** 1-hour default with extension
- **Response Time:** Near-instantaneous for local operations

Data Structure Requirements

- **Complete JSON:** All repo uploads must include full data.json structure
- **Required Fields:** ISBN, Master Order ID, TITLE, Status minimum
- **Status Values:** "POD Ready", "MPI", or custom status strings
- **ISBN Format:** 10-13 digit numbers, automatically normalized

Support

Getting Help

- **Documentation:** Review this README for detailed guidance
- **Browser Console:** Check for error messages and warnings
- **Test Data:** Use sample data to isolate issues
- **Version Check:** Ensure all files are from the same version

Reporting Issues

When reporting problems, include:

- Browser type and version
- Error messages from console
- File types and sizes being processed
- Steps to reproduce the issue
- Status values and expected behavior

Feature Requests

The application is designed for extensibility. Common enhancement areas:

- Additional status types and workflows

- Enhanced security features
- Advanced reporting capabilities
- Integration with external systems
- Batch processing optimizations

Version History

v4.0 - Status Field & JSON-Only Repo Management

- **Added:** Status field support with POD Ready/MPI/Not Available indicators
- **Added:** Dual search capability (ISBN and Master Order ID)
- **Added:** Enhanced filtering for MPI and Not Available items
- **Added:** JSON-only repo management with complete data structure preservation
- **Added:** Masked password input with professional dialog
- **Added:** Collapsible format documentation
- **Enhanced:** Status-aware processing and display throughout application
- **Enhanced:** Comprehensive status breakdown in loading messages
- **Simplified:** Removed Excel/CSV support from repo management
- **Improved:** Template examples with current data structure

v3.0 - Complete Security & Repo Management

- **Added:** Password protection for repo management
- **Added:** Session management with visual timer
- **Added:** Complete title removal functionality (individual and bulk)
- **Added:** Enhanced statistics dashboard with 6 metrics
- **Added:** Access status bar with logout functionality
- **Enhanced:** Security headers and input validation
- **Enhanced:** User interface with professional styling
- **Enhanced:** Error handling and user feedback

v2.0 - Enhanced Security & ISBN Search

- **Added:** Individual ISBN lookup functionality
- **Added:** Comprehensive security enhancements (CSP, input validation, XSS protection)
- **Added:** File size limits and enhanced error handling
- **Enhanced:** User interface with responsive design
- **Enhanced:** Repo addition workflow with preview tables

v1.0 - Initial Release

- **Core:** Excel upload, validation, and CSV export
- **Core:** Order processing with Clays POD format
- **Core:** Batch operations and clipboard integration

License

This application is designed specifically for Clays Ltd print-on-demand operations. All configuration and branding elements are customized for Clays POD workflow requirements with status-aware processing

capabilities.

For technical support or customization requests, please refer to the troubleshooting section above or consult your system administrator.