MTM WIP Application - What's New

> **User-friendly release notes for shop floor and office staff**

Latest Update - October 26, 2025 (Version 5.4.1)

What Changed: Export and enhanced filtering for error reports
Do I Need To Do Anything?: No - just more powerful tools for IT support and developers

⊛ What This Means For You

For IT Support and Developers: Export Error Reports to CSV/Excel

New export capabilities (added October 26, 2025):

- **Export to CSV** - Quick and simple format that opens in Excel, Google Sheets, or any spreadsheet program
- **Export to Excel** - Professional formatted workbooks with properly sized columns and bold headers
- **Export all or selected** - Choose specific reports to export, or export everything matching your current filters
- **One-click operation** - Just click the "Export to CSV" or "Export to Excel" button at the top of the window

Enhanced filtering and tracking:

- **Computer name tracking** - Now shows which specific computer (machine name) each error came from
    - Example: "SHOP-PC-01", "OFFICE-LAPTOP-05", "RECEIVING-STATION-03"
- **Filter by machine** - Find all errors from a specific computer to troubleshoot machine-specific issues
- **Improved search performance** - Faster filtering when working with hundreds or thousands of error reports
- **Better column organization** - More logical grouping of information in the grid

Why this helps:

- **Team meetings**: Export filtered reports to review as a team or with management
- **Trend analysis**: Import exports into pivot tables or other analysis tools to spot patterns
- **Machine-specific troubleshooting**: Quickly identify if one computer has more issues than others
- **Monthly reporting**: Generate compliance or summary reports for documentation requirements
- **Backup and archiving**: Keep historical records of resolved issues in spreadsheet format

How to export:

1. Open **Development** menu → **View Error Reports**
2. **(Optional)** Apply filters to narrow down the reports you want:
    - Filter by date range (last week, last month, etc.)

- Filter by user (see issues from specific staff members)
- Filter by machine (see issues from specific computers)
- Filter by status (New, Reviewed, or Resolved)
- Search for specific error messages or keywords

3. Click **"Export to CSV"** or **"Export to Excel"** button at the top
4. Choose where to save the file on your computer
5. Open the file in Excel, Google Sheets, or any spreadsheet program

Example use cases:

- "*Show me all errors from SHOP-PC-01 in the last 7 days*" → Filter by machine and date, then export
- "*I need a monthly error summary for the management meeting*" → Filter by month, export to Excel, create charts
- "*Which computers are having the most problems?*" → Export all, sort by MachineName column in Excel
- "*Archive all resolved issues from Q3 for compliance records*" → Filter by status=Resolved and date range, export to CSV

Update - October 26, 2025 (Version 5.4.0)

What Changed: New error report management system for developers
Do I Need To Do Anything?: No - this is a developer-only feature

⚙ What This Means For You

For IT Support and Developers: Manage User-Reported Issues

New "View Error Reports" feature (accessible from Development menu):

- **Browse all error reports** submitted by users in one place
- **Search and filter** by date, user, machine, or error type
- **View complete details** including what the user was doing, technical information, and error stack traces
- **Track investigation progress** by marking reports as Reviewed or Resolved
- **Add developer notes** to document your findings and solutions

Why this helps:

- **Faster problem resolution**: See all error reports in one organized view instead of checking emails or logs
- **Better prioritization**: Color-coded status (Red=New, Yellow=In Review, Green=Resolved) helps you focus on urgent issues
- **Team coordination**: Developer notes prevent duplicate investigation efforts
- **Pattern detection**: Filter and export tools help identify recurring issues

How to access:

1. Click **Development** menu in the main application
2. Select **View Error Reports**
3. Use filters to find specific reports or browse the full list

Status workflow:

- **New** (Red) → User just submitted, needs investigation
- **Reviewed** (Yellow) → Developer is investigating or needs more info
- **Resolved** (Green) → Issue fixed or documented

Update - October 26, 2025 (Version 5.3.0)

What Changed: New error reporting feature
Do I Need To Do Anything?: No - but you can now help us fix problems faster!

⦿ What This Means For You

Help Us Fix Problems Faster

New "Report Issue" button in error messages:

- When something goes wrong, you'll see a **"Report Issue"** button
- Click it to tell us what you were doing when the error happened
- Just type a quick note like "I was trying to transfer part #12345 to location B"
- Your report gets a tracking number so we can follow up with you

Why this helps: We can fix problems faster because we know exactly what you were doing when things went wrong.

Works Even When Network is Down

Don't worry about losing reports:

- If the network is down, your report is saved locally
- When the network comes back, reports are sent automatically
- You'll never lose a report due to network issues

What you'll see: If network is down, you'll see a message like "Report saved and will be sent when connection is restored"

Update - October 25, 2025 (Version 5.3.2)

What Changed: Better error tracking with computer names
Do I Need To Do Anything?: No - automatic improvement

⊙ What This Means For You

Automatic Computer Name Tracking

What's new (added October 25, 2025):

- When you submit an error report, the system now automatically records which computer you're using
- Shows the actual computer name (like "SHOP-PC-01" or "OFFICE-LAPTOP-05")
- This happens automatically in the background - you don't need to do anything

Why this helps:

- **IT can troubleshoot faster**: If your computer is having issues, IT can see your computer name in the error report
- **Identify problem machines**: If one computer has repeated issues, IT can swap it out or investigate hardware problems
- **Better support**: When you call IT for help, they can pull up all error reports from your specific computer

What you'll see:

- Nothing different when submitting reports - it still works exactly the same way
- If IT asks you about an error, they might now say "I see you had this error on SHOP-PC-01" instead of just asking "which computer were you on?"

Update - October 25, 2025 (Version 5.3.1)

What Changed: Display scaling improvements
Do I Need To Do Anything?: No - just click "Restart" when prompted if you move between monitors

⌖ What This Means For You

Better Display on Different Monitors and Screen Scaling

If you use multiple monitors, move your laptop between different displays, **or change your Windows screen scale** (100%, 125%, 150%, 175%, 200%):

- The application now **asks before automatically resizing** when display scaling changes
- You'll see a clear message like: "Display changed from 100% to 150%"
- You can choose what happens:
    - **Restart Now** (recommended) - Cleanest, fastest option - everything looks perfect
    - **Auto-Resize** - Immediate but windows may look weird temporarily
    - **Cancel** - Keep using as-is

When does this happen?

- Moving windows between monitors with different scaling settings
- Docking/undocking your laptop
- Changing Windows Display Settings → Scale (System > Display > Scale in Windows Settings)

Why this helps: No more surprise layout changes or stretched windows. You stay in control of when the app adjusts to your display changes.

Error Messages Look Right Now

What was wrong: Error dialogs were too large on some monitors (especially 4K displays and laptops with high-resolution screens)

What's fixed: Error messages now appear at the right size on all screens - no more giant dialogs that extend off-screen

What you'll notice: When errors happen, the message fits nicely on your screen with all buttons visible and clickable

Update - October 22, 2025 (Version 5.2.0)

What Changed: Database reliability improvements - 100% test coverage achieved
Do I Need To Do Anything?: No - behind-the-scenes improvements for stability

⚙ What This Means For You

Rock-Solid Database Operations

Comprehensive testing completed:

- **136 integration tests** now passing (was 113 - 83% coverage)
- **23 critical bugs fixed** in database operations
- **All inventory, transfer, and quick button operations validated**
- **Production-ready reliability** for manufacturing operations

What improved behind the scenes:

- Quick button operations (add, update, move, delete) work perfectly every time
- System settings and user preferences save and load correctly
- Inventory adjustments and transfers process reliably
- Error messages are clearer and more helpful

Why this matters:

- **Fewer errors**: Operations that occasionally failed now work every time
- **Faster fixes**: When something does go wrong, we can identify and fix it quickly
- **Better data quality**: Your inventory counts and transaction history stay accurate
- **Confidence**: The application has been thoroughly validated for manufacturing use

What you'll notice:

- Quick buttons respond faster and more reliably
- Fewer "unexpected error" messages during daily operations
- More consistent behavior across different computers and users

Technical highlights (for IT staff):

- 100% DAO (Data Access Object) method coverage
- Comprehensive stored procedure validation
- Test data infrastructure for repeatable validation
- Average 18 minutes per test fix (6.75 hours total effort)

Update - October 17-21, 2025 (Version 5.1.0)

What Changed: Database layer modernization - comprehensive refactoring
Do I Need To Do Anything?: No - internal improvements only

⌖ What This Means For You

Modernized Database Architecture

Major behind-the-scenes overhaul completed:

- **60+ stored procedures standardized** with consistent error handling
- **12 Data Access Objects (DAOs) refactored** for reliability
- **220+ database call sites updated** to modern async patterns
- **Transaction management improved** for data integrity

What this prevents:

- MySQL parameter errors that caused confusing error messages
- Data corruption from incomplete multi-step operations
- Application crashes during database connectivity issues
- Inconsistent behavior across different features

Improved error handling:

- **Graceful connection failures**: If database becomes unavailable, you'll see "Connection lost. Retry?" instead of crashes
- **Better error messages**: Clear, actionable messages instead of cryptic MySQL errors
- **Automatic retries**: Transient network issues handled automatically
- **Data protection**: All multi-step operations (transfers, adjustments) now use transactions - either all steps succeed or all rollback

For IT Support and Developers:

- **Developer Tools Suite** added to Settings menu
  - Debug Dashboard for real-time application monitoring
  - Parameter Prefix Maintenance for stored procedure management
  - Schema Inspector for database structure review
  - Code Generator for DAO method creation
  - Procedure Call Hierarchy visualization
- **Developer Role** introduced (requires Admin + Developer privileges)
- **Comprehensive logging** with method names, parameters, and call stacks
- **Performance monitoring** with configurable slow query thresholds:
  - Queries: 500ms
  - Modifications: 1000ms
  - Reports: 2000ms
  - Batch operations: 5000ms

Infrastructure improvements:

- **Test database**: `mtm_wip_application_winform_test` for isolated integration testing
- **Transaction support**: All DAO methods now support external transactions
- **Connection pooling**: Configured for 5-100 connections for optimal performance
- **Parameter detection**: Automatic INFORMATION_SCHEMA queries at startup for accurate parameter mapping

Why you won't notice much:

- This was all internal plumbing work
- Operations work the same way they always have
- But now they're more reliable, faster to fix, and better documented
- Foundation laid for future feature development

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🆘 Need Help?

Questions about the update: Contact John Koll at (ext. 323) or jkoll@mantoolmfg.com / Dan Smith at (ext. 311) or dsmith@mantoolmfg.com / Ka Lee at (ext. ___) or klee@mantoolmfg.com

Found a problem: Use the new **"Report Issue"** button in error messages (that's what it's for!)

Can't login after update: Contact John Koll at (ext. 323) or jkoll@mantoolmfg.com / Dan Smith at (ext. 311) or dsmith@mantoolmfg.com / Ka Lee at (ext. ___) or klee@mantoolmfg.com

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🗒 Common Questions

Q: Will I lose my work when the app restarts for display changes?
A: Yes

Q: How do I change my Windows screen scale?
A: Go to Windows Settings → System → Display → Scale. You can choose 100%, 125%, 150%, 175%, or 200%. The app will prompt you to restart after you change this setting.

Q: Do I have to submit error reports?
A: No, it's optional - but it helps us fix problems faster if you do

Q: What information is sent in error reports?
A: Your username, what you were doing (if you tell us), the error details, and the date/time. No personal information or production data is sent.

Q: Can I see my submitted reports?
A: Yes - Contact John Koll at (ext. 323) or jkoll@mantoolmfg.com / Dan Smith at (ext. 311) or dsmith@mantoolmfg.com / Ka Lee at (ext. ___) or klee@mantoolmfg.com and provide your Report ID number

Q: What if I submit a report by accident?
A: No problem - Contact John Koll at (ext. 323) or jkoll@mantoolmfg.com / Dan Smith at (ext. 311) or dsmith@mantoolmfg.com / Ka Lee at (ext. ___) or klee@mantoolmfg.com

🎉 Coming Soon

We're working on even more improvements:

Next Updates (Planned):

In Development (61% Complete):

- 📋 **View Application Logs** - New developer feature to view application activity logs for troubleshooting

    - ☑ Browse log files by user and date
    - ☑ Navigate through log entries with Previous/Next buttons
    - ☑ View parsed log details with color-coded severity levels
    - ☑ Copy log entries to clipboard (Ctrl+C)
    - ☑ Emoji indicators for log types with text fallbacks
    - ☑ Formatted JSON details display
    - 🚧 Coming soon: Advanced filtering, raw/parsed view toggle, auto-refresh
    - **Who needs this**: IT support staff and developers troubleshooting application issues

- 🐛 **Improved Transaction Viewer (HIGHLY REQUESTED!)** - Better ways to view and search your inventory transaction history with advanced filtering, sorting, and export options. This has been one of the most requested features from shop floor staff!

- **Enhanced Developer Settings Menu** - More tools and options for IT staff and power users (SQL Server Backup, SQL Server Restore, User Analytics, exc...)

- Enhanced multi-monitor support and display scaling improvements

- Better visual feedback during network issues

Last Updated: October 26, 2025
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