

MacromatiX Release

2024.1

Released January 2024

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Livelihood	Error! Bookmark not defined.

Introduction

This document communicates the major new features and changes in the 2024.1 MacromatiX Release. It also references issues that were addressed during this release. MacromatiX is a cloud-based operating system that provides operational efficiency, cost controls and real-time visibility into restaurant operations that keep the manager in front of customers and focused on their experience, rather than stuck in the back office staring at spreadsheets. Get instant insight into inventory and financials with in-depth, down-to-the item reporting. Gain access to sales data, gross profit, cost of goods sold, loss prevention and exception management with the ability to report down the item level at individual stores. With MacromatiX, food is fresher, waste is reduced, and gross profits are increased.

About This Release

The 2024.1 release includes substantive changes to improve the MacromatiX user experience. A few of the release highlights for MacromatiX Desktop and MxConnect (Mobile) are detailed below

Release Highlights

- ★ MX-NearRealTime - Data Transfer - Low Stock Items
- ★ Accept Location data from Central Location Service
- ★ Emit New and Updated Location data to Central Location Service
- ★ MX-RME Integration - Data Exports
- ★ Rename “Global Profile” to “Fourth Account”
- ★ MX-HS Integration Alignment with CLS

Desktop (MMS)		
	Features	Defects
Core	11	15
Financial		
Forecasting		
Inventory	1	
Production		
Reporting	3	
Workforce		
Total	15	15

Mobile (MxConnect)		
	Features	Defects
Core	10	27
Financial	2	
Forecasting		
Inventory	2	
Production	1	
Reporting		
Workforce		
Total	15	27

Additional Applications	
	Features
CloudLink	6
LiveLink	
RDS	1
Server Manager	9

Total	16
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MacromatiX Desktop (MMS)

Core

MX-HS Integration Alignment with CLS (F22444)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

Summary

Prior to the availability of the Central Location Service, MacromatiX and HotSchedules mapped the HotSchedules 'HS Store Number' attribute to MacromatiX 'Store Number'. This is no longer valid in the new model. With the Central Location Service, the attribute 'Code' or 'location_code' represents the customer-defined store number and it supports alphanumeric values. The 'HS Store Number' only accepts numeric values. As such, the following should apply:

CLS	HotSchedules	MacromatiX
location_code	Alphanumeric Store ID	StoreNumber
location_name	Client Name	Entity
HS_StoreNum (new)	StoreNum	HsStoreNum (new)

Currently, all integrations between MacromatiX and HotSchedules use the MX 'Store Number' (alphanumeric) when calling the HotSchedules API, which requires a valid 'StoreNum' in HotSchedules. Moving forward, the MX 'Store Number' and the HotSchedules 'StoreNum' will not match. Therefore, the following changes are needed:

1. Provide the ability to capture the 'HS Store Number' against locations in MX
 - a. From CLS message data
 - b. From MX Entity Import
 - c. Within MMS Entity Management UI
 - d. Within MxConnect Entity Management UI
2. Update the Forecast Exports from MX to HS to pass the 'HsStoreNum' attribute instead of the 'StoreNumber' attribute.

- a. Forecasted Sales
 - b. Forecasted Sales by Service Type
3. Update the Actual Sales Export from MX to HS to pass the 'HsStoreNum' attribute instead of the 'StoreNumber' attribute.
 4. Update the Transaction Count Export from MX to HS to pass the 'HsStoreNum' attribute instead of the 'StoreNumber' attribute.
 5. Update the Guest Count Export from MX to HS to pass the 'HsStoreNum' attribute instead of the 'StoreNumber' attribute.
 6. Update the Employee Import from HS to MX to perform a look-up against the 'HsStoreNum' for locations instead of the 'StoreNumber'.

Components

Component	User Story
SPIKE: Investigate how RDS and Cube deploy is currently done & what files need to be produced	US153087
RDS Octopus Deployment	US168006
Deployment optimisations and issues	US168318
RDS Azure pipeline build	US159819
Test report prefixes (SQL 2019 - SSRS)	US160078
Setup the deployment targets for the remaining QA servers	US159836
Setup the existing QA clients as tenants - Part 1	US168004
RDS - Investigate publishing of RDS Extensions/Adapters, revise current PS implementation and fix problems with it	US168013
Setup the existing QA clients as tenants - Part 2	US168003
Vendor and Report Portal Packaging	US170053

Component	User Story
Deployment Pipeline > Enable parallel deployment for steps	US163670
Patch back RDS changes and optimizations to release branches and create documentation	US169345
SPIKE: Investigate OE Site setup documentation and identify gaps	US169399
How the Mx.Services SSRS data source gets configured with the deployment process currently	US160077

Configuration Settings

- New permission added under System → Entity Manager - HS StoreNum - Can View

Entity manager - Fourth Location ID - Can view	<input type="checkbox"/>	
Entity Manager - Full Access	<input checked="" type="checkbox"/>	
Entity Manager - HS StoreNum - Can View	<input type="checkbox"/>	
Entity Manager - Store (Address) - Can Edit	<input checked="" type="checkbox"/>	
Entity Manager - Store (Address) - Can View	<input checked="" type="checkbox"/>	

MX-CUP Integration - Send current "Permission Sets" to CUP (F21537)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

Summary

1. CUP Access Level Management:
 - All Fourth products/services ensure that the Central User Provisioning (CUP) maintains an up-to-date list of active Access Level names and corresponding IDs.
2. Enhanced User Interface in CUP:
 - CUP interface will display the current list of Access Level names for each application on the "Edit Profile" screen.
 - Users will have the ability for multiple selections.
3. UserProfile Updates Standardization:
 - Upon saving changes, subsequent UserProfileUpdated messages sent by the CUP services will consistently reflect the updated profile configuration.

Reason for change:

1. Maintaining Accurate Profiles:
 - To ensure customer admin users consistently view accurate "Permission sets" for each target application within CUP.
 - The aim is to facilitate accurate profile updates for processing in each associated application, ensuring seamless functionality and data integrity.
2. Improved User Experience:
 - Enhancing the CUP interface with the current Access Level names provides transparency and ease of selection for users managing permissions.

Components

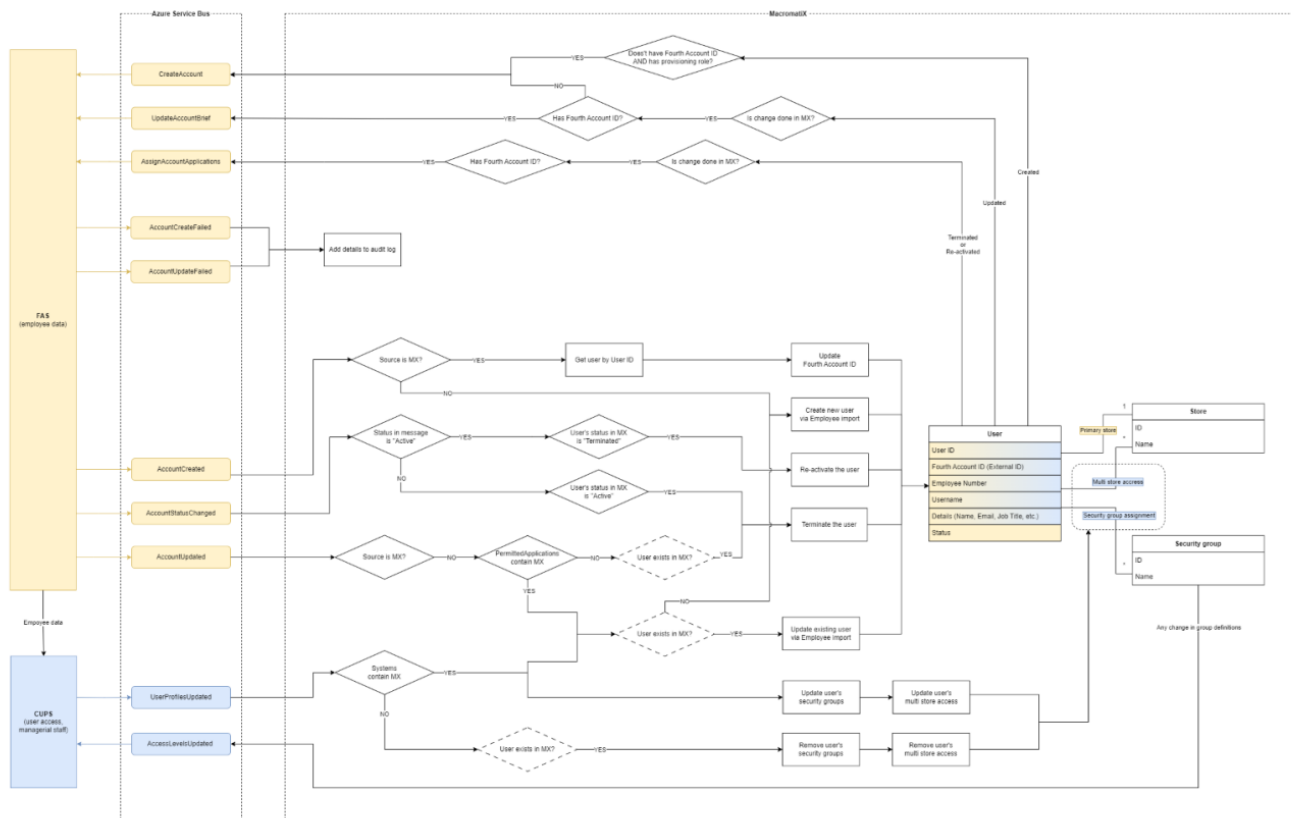
Component	User Story
Security Groups Export to CUPS	US169184
E2E testing - Security groups	US170093

MX-CUP Integration - Accept New and Updated User Data from CUP and FAS (F21014)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

Summary

This feature is in regards for integrating Macromatix with Fourth Account Service (FAS) and Central User Provisioning Service (CUP) in order to achieve SSO Level 4. The diagram below shows the scope of the integration between MacromatiX, FAS and CUP: Data owned by FAS is displayed in yellow. This includes user's properties (first name, last name, etc.) identifiers (Fourth Account ID, Employee Number, etc.,) as well as the primary store. Data owned by CUP is in blue. This includes user's security groups and store assignments. Note: primary store is managed by FAS, whereas other stores (if the user has multi-store assignments) are managed by CUP.



Integration with FAS

List of messages exchanged between MX and FAS.

MacromatiX → FAS

- **CreateAccount** - Sent when a new user is created in MacromatiX and it doesn't have Fourth Account ID
 - In the **CreateAccount** message, one of the properties is called **LocationCodes**. In this property, as first element is set the primary store **Fourth location id** and the rest are all the stores (**Fourth location ids**) to which the given user has access.
- **UpdateAccountBrief** - Sent when user's data is modified in MacromatiX and the user has Fourth Account ID
- **AssignAccountApplications** - Sent when user's status has changed in MacromatiX and the user has Fourth Account ID. If the user has been terminated, "MacromatiX" is put in the list of ApplicationsToRemove in the message. If the user has been re-activated, "MacromatiX" is put in the list of ApplicationsToAdd

FAS → MacromatiX

- **AccountCreated** - If the Source is:
 - MacromatiX → Fourth Account ID of the user is set in MX
 - Other → if TargetSystems contains MacromatiX, a new user is created in MX
- **AccountUpdated** - Handled only if the Source is not MacromatiX
 - If PermittedApplications contains MacromatiX and the user exists → user's data is updated in MX
 - If PermittedApplications contains MacromatiX and the user does not exist → a new user is created in MX
 - If PermittedApplications does not contain MacromatiX, but the user exists → user is terminated in MX
- **AccountStatusChanged** - Status of the user in MX is updated according to the following mapping:
 - Global status: "Active" → "Active" in MacromatiX
 - Any other global status → "Terminated" in MacromatiX
- **AccountCreateFailed** - Sent by FAS in response of CreateAccount. Details are added to the MX audit log.
- **AccountUpdateFailed** - Sent by FAS in response of UpdateAccountBrief. Details are added to the MX audit log.
- **AccountStatusChangeFailed** - Sent by FAS in response of ActivateAccount and DeactivateAccount. Details are added to the MX audit log.

Integration with CUP

List of messages exchanged between MX and CUP.

CUP → MacromatiX

- **UserProfilesUpdated**
 - If Systems contain MacromatiX and the user exists → user's data, security groups and store assignments are updated in MX

- If Systems contain MacromatiX and the user does not exist → a new user is created in MX, along with security groups and store assignments
- If Systems does not contain MacromatiX, but the user exists → its security groups and store assignments are deleted in MX

MacromatiX → CUP

- **AccessLevelsUpdated** - Sent when any security group changes in MX.

Reason for change:

1. Centralized User Profile Management:

- To facilitate provisioning, updating, and termination of MacromatiX users through a centralized service (CUPS).
- Ensuring proper linking of SSO users and accurate assignment of permissions based on centrally defined profiles in CUPS.

2. Automated User Access Management:

- Enabling automatic synchronization of user access and permissions across Fourth products based on centrally defined user profiles.
- Streamlining user access provisioning and termination processes to align with their roles, enhancing operational efficiency.

Components

Component	User Story
Spike: Understand consequences of user termination in MacromatiX	US173391
Create new User when AccountCreated message is received	US173392
Update existing user when AccountUpdated message is received	US173837
Update user when UserProfilesUpdated is received	US174352
Update user when AccountStatusChanged is received	US174353
Display warning when modifying user's security groups and/or store assignments and the user has been managed by CUPS - MMS	US173294

Terminate existing user when Mx is not in the list of permitted apps in AccountUpdated	US174055
Display warning when modifying user's security groups and/or store assignments and the user has been managed by CUPS - MxConnect	US175096
Send location codes when employee data is created in MacromatiX	US175882
Add automation tests for Employee Import	US175883
Update existing user when AccountUpdated message is received	US173837

MX-CLS Integration - Align Country Codes (F22647)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

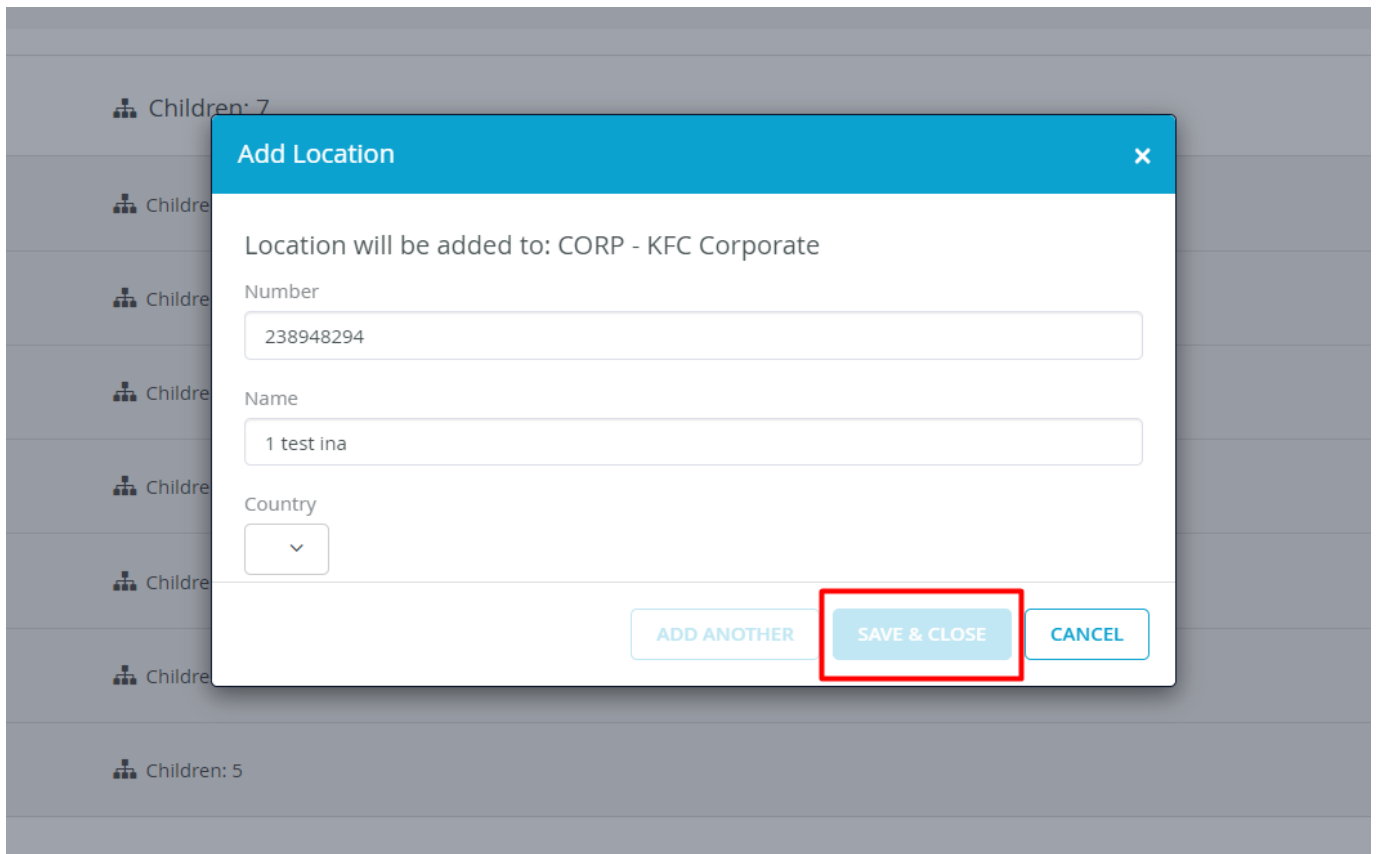
Summary

1. Standardization of Country Data:

- The modification of the "Country" drop-down list data across all environments to ensure consistency, inclusion of all possible countries, and compatibility with the CLS (Central Location Service).
- Making the "Country" field mandatory in MX (MMS, MxConnect, and Import) to align with the standardized list.
- New configuration introduced.



- If the setting is on user cannot save entity if country is not chosen:



- New validation exist when entity is saved:

Entity Manager

Entity Type: Store Entity: Wentworthville South

New Entity Cancel

Update / Save Delete

*** Country is required**

Address Contacts Financial Info Fees and Payments Classification Trading Times Labour Store Layout Attributes

Entity

Name: Wentworthville South

Reports to: Lamstan Group Phone: 02 9896 1565

Yum! Store #: 2214 System ID: 4 Fax:

CFL Store #:

Street Address

Street: 49 Old Prospect Road

City: South Wentworthville

State: NSW Post Code: 2145

Country: Not Set

*** Country is required**

Mailing Address

Street: 49 Old Prospect Road

City: South Wentworthville

State: NSW Post Code: 2145

Country: Not Set

Update / Save

Reason for Change?

1. Data Consistency and Compatibility:

- Standardizing the "Country" drop-down list ensures consistency across all environments, enabling compatibility with the CLS.
- Matching values on our side are necessary for successful location imports from the CLS, preventing failures during data import.

2. Operational Streamlining and Configuration Flexibility:

- Making "Country" a required field in MX ensures data completeness and accuracy, particularly when involving the CLS.
- Considering a configurable option ("Entity Manager - Country is a required field (True/False)") allows flexibility, making the field mandatory only when CLS integration is in use.

3. Enhanced Data Source Management:

- Exploring the possibility of changing the data source for available countries, considering a shift from the current customizable "List Maintenance" mechanism to align with the data source used by CLS or another valid list provider.
- This step aims for a more reliable and standardized country list management process within MX.

Components

Component	User Story
Make Country a required field in MMS	US171482
Map the country code to valid country name	US172233
Create Country field in MXConnect	US172239

Configuration Settings

- New configuration under Core - Entity : "Entity Manager - Country is required", so that it is only required when CLS is involved.

SSO Level 4 - Support for creating multiple accounts with the same email address (F21524)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

Summary

Each Fourth product or service is required to activate Fourth Accounts (SSO Level 4) for all application users by default for new customers. The goal is to have the ability and allow creating multiple accounts with the same email address in FAS.

Reason for change:

1. Enhanced User Experience and Functionality Access:

- Enabling Fourth Accounts (SSO Level 4) by default ensures that all new application users have access to the Single Sign-On (SSO).
- Provides immediate access to SSO-dependent functionalities like NRT (Near Real-Time) and Messaging right from the outset for new users.

2. Seamless Onboarding for New Customers:

- Facilitating a seamless onboarding experience for net new application users within Fourth products and services.
- Enables instant access to SSO functionalities, enhancing usability and operational efficiency from day one.

Components

Component	User Story
Allow creating multiple accounts with the same email address in FAS	US171987

TECH: Observability enhancements (F22723)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

Summary

Enhancement of Observability through OpenTelemetry Integration:

1. OpenTelemetry Integration:

- Merge of the OpenTelemetry integration branch aimed at incorporating OpenTelemetry, facilitating metrics and KPI visualization in Grafana, and capturing distributed traces to visualize end-to-end (E2E) processes and their timing.

2. Technical Defects for Observability Enhancements:

- Identification and resolution of technical defects related to the ongoing work on Observability enhancements. This involves addressing any issues or hurdles encountered during the integration and deployment of OpenTelemetry.

3. AI Forecasting Instrumentation:

- Implementation of instrumentation for AI Forecasting processes to ensure their observability. This involves integrating OpenTelemetry to capture relevant metrics and traces related to AI Forecasting operations, enabling comprehensive monitoring and analysis.

4. Central Provisioning Instrumentation:

- Instrumentation implementation focused on Central Provisioning processes. Integration of OpenTelemetry into Central Provisioning functionalities to capture relevant data for observability purposes, enabling robust monitoring and visualization.

These initiatives collectively aim to enhance observability within the system by leveraging OpenTelemetry integration, addressing technical defects, and specifically instrumenting AI Forecasting and Central Provisioning processes. The objective is to enable comprehensive monitoring, metrics visualization, and end-to-end trace visualization for improved system observability and performance analysis.

Components

Component	User Story
Merge OpenTelemetry integration branch	US170373

Tech Defects for Observability enhancements work	US173368
AI Forecasting Instrumentation	US170374
Central Provisioning Instrumentation	US170375

TECH: Code Health and Vulnerabilities (F22440)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Core</u>

Summary

1. SonarQube Scan Execution:

- Execution of a comprehensive SonarQube scan aimed at assessing code health and identifying potential vulnerabilities within the system.

2. Analysis and Investigation:

- Post-scan, analysis of the SonarQube results is imperative. This involves a deeper investigation into the scan results to identify dependencies and potential vulnerabilities flagged by the scan.

3. Quality Assurance and Security Measures:

- Ensuring a quality and secure solution for customers by conducting routine code health and vulnerability scans. This proactive approach aims to prevent unforeseen issues and guarantees a robust and secure solution.

The SonarQube scan serves as an initial step in assessing code health and potential vulnerabilities. The subsequent analysis and investigation into the scan results are crucial for identifying, prioritizing, and addressing any flagged issues, thereby fortifying the system's security and overall quality.

Components

Component	User Story
SPIKE - Security Hotspots - Authentication	US168886
SPIKE - Security Hotspots - SQL Injection	US168887
SPIKE - Security Hotspots - Cryptography	US168890
SPIKE - Security Hotspots - Other (Low)	US168891

Inventory

MX-RME Integration - Data Exports (F21632)

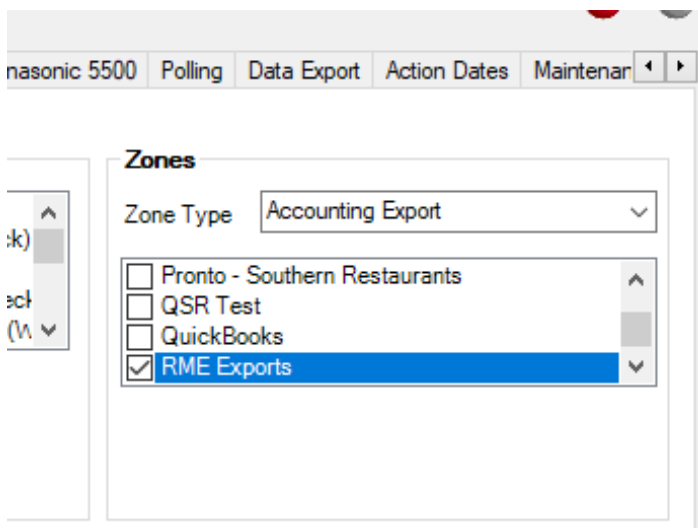
Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Inventory</u>

Summary

The scope of this feature is creation of exports from Mx to RME, so that the data in relation to products and menu items is transferred and mapped successfully. The exports for RME will be triggered through the Server Manager and they should be executed in a specific order, as the RME API for some of the endpoints requires that we send the internal RME ID of the items, which are already created on their side through the API, which is asynchronous and does not send response when the processing is done and whether the result is successful. (Example: If we want to export a main category, then the category types in RME should already exist in order to send the appropriate parent ID of the category type. The category types API Endpoint should be successful and the background process on their side should be done, in order to send the main categories under the specific category type.

Prerequisites for the exports to work:

- You should set the username and password for the export delivery type in the database table: tbTaskXSLTWebService
- You should assign one zone with one store on the export. Usually, we should create zone RME Exports with one store on the Accounting Export zone type, as shown in the screenshot.



Components

Component	User Story
SPIKE Investigate how to map Mx UoM to RME	US175066
Phase 2: RME Export - Category Import - Item Subgroup (level 2)	US171186
Phase 2: RME Export - Category Import - Item Group (level 1)	US142262
Phase 2: RME Export - Ingredient Import and Conversion Info	US173825
Phase 2: RME Export - Ingredient Category relation	US142264
Phase 2: RME Categories export changes	US173967
Phase 2: RME Export - Alternate Ingredient Import (Vendor/Supplier Item)	US142267
Phase 2: RME Export - Category Type Import	US173085
Phase 2: RME Export - Supplier Import	US142271
Phase 2: SPIKE - Determine how Category type is returned via GetCategories API	US171184
Phase 2: SPIKE - Determine how to send the UOM and Conversion Info to RME	US171185
Phase 2: RME Export - Recipe Import (Ingredients creation)	US175061
Phase 2: RME Export - Recipe Import (Recipe creation, Standard and Combo)	US175060
Phase 2: RME Export - Recipe Import (Categories creation)	US171190
Phase 2: RME Export - Recipe Import (BOM items)	US175056

Reporting

MX-NearRealTime - Data Transfer - Low Stock Items (F21245)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>New Feature</u>	<u>Inventory, Reporting</u>

Summary

- **Actionable Insights:** The NRT initiative have the intention to be enhanced functionality, aiming not just to display data but to generate actionable insights for Fourth products. This enhancement empowers users by providing recommendations based on collected data.
- **Real-time Stock Analysis:** A new process is introduced to run periodically (configurable intervals of 5, 15, or 20 minutes). This process analyzes current inventory levels, expected incoming orders, and forecasted sales data. It identifies items at risk of low stock, leveraging a store-specific minimum stock level (Min Level) for proactive decision-making.
- **Low Stock Prediction:** By evaluating current on-hand stock against expected receipts and utilizing configurable parameters for stock monitoring, the system flags items at risk of going out of stock. The idea is to prompts users with actionable suggestions like placing orders, sourcing from local suppliers, or transferring stock between locations.

New checkbox introduced on MMS_Manage_InventoryItem.aspx page for flagging an item if should be considered for the NRT.

Inventory Items

Item Details | Per Entity | Accounting Information

Buttons: Add New Item | Update/Save | Cancel

Status
 Not Set

Group
 Not Set

Items

Count Frequency

- Spot Check
- Daily
- Weekly
- Monthly
- Period

Selected Item

Item Code: []

Description: []

Product Cost Classification: Not Set

UPC / Barcode: []

Item Type: Regular

Status: Not Set

Group: Not Set

Sub Group: Not Set

Inventory Unit: Not Set

Purchase Unit: Not Set

Manufacturer: Not Set

Brand / Make: []

Other ID: []

Vendor Class: []

Item Analysis

Item Class: Not Set

Sales Category: Not Set

Royalty Group: Not Set

Stocktake Group: Not Set

Yield Group: Not Set

System ID: []

Easy Order Item

Multi Order Item

Zero Line On Delivery

Brand: Not Set

Stocktake "Box": Not Set

Stocktake "Inner": Not Set

Stocktake "Weight": Not Set

Size: []

Flavour / Model: []

Order Class: Not Set

Set Units

- Track Sales
- Sales Analysis
- Forecast
- Rebate
- Include In Stocktake
- Include In Yield
- Enable Stock Level Analysis

When an item is checked and the process for sending data to NRT is triggered message under the following format will be sent:

Field	Type	Description	MX Field Equivalent
ItemsNearStockOut			
CustomerCanonicalId	string	Fourth Customer Canonical ID	tbEntity.FourthAccountID
LocationCanonicalId	string	Fourth Location Canonical ID	tbEntity.FourthLocationID
Source	Fourth.Streaming.Events.SourceSystemId	Source system of the event	SourceSystemID.Macromatix
EventTime	timestamp_ms	Time the event took place at UTC	?
NearStockOutItems	array<ItemsNearStockOutItem>	List of items near stock out (on hand <= par level)	TBD Criteria
ItemsNearStockOutItem			
ItemExternalId	string	Unique source system identifier for the item	tbitem.ItemId
ItemCode	string	Natural unique identifier for the item	tbitem.ItemCode
ItemDescription	string	Description of the item	tbitem.Description
UnitOfMeasureExternalId	string	Unique source system identifier for the unit of measure	tbUnitOfMeasure.UomName
UnitOfMeasureDescription	string	Description of the unit of measure	tbUnitOfMeasure.UomDescription/UomName(as fallback if description is blank)
UnitCost	double	The latest inventory unit cost of the item	tbEntityItem.InventoryUnitCost
OnHandQuantity	double	Current on-hand quantity of the item	tbitemQty.fOnHand_qty
OnOrderQuantity	double	Current on-order quantity of the item	tbitemQty.fOnOrder_qty
ParLevelQuantity	double	Reorder or par level of the item	tbitemQty.ReorderLevel_Qty
LastCountedTime	timestamp_ms?	The last counted time of the item at UTC	tbTransactionStockCount.StockCountDate
LastCountedQuantity	double?	The last counted quantity of the item	tbTransactionStockCount.StockCount
NextDeliveryTime	timestamp_ms?	The next expected delivery time of the item at UTC	tbtransactionsupplyorder.iRequired_dt
NextDeliveryQuantity	double?	The next expected delivery quantity of the item	tbtransactionsupplyorderdetail.fOrdered_qty

Reason for change:

- To move beyond current once-a-day data pulls, enabling real-time insights and proactive actions.
- Provide managers with immediate and actionable recommendations for efficient operations and increased profitability.
- To ensure efficient inventory management by proactively identifying and addressing potential stock shortages before they occur.
- Enhance decision-making by providing real-time visibility into stock levels and anticipated deliveries, allowing timely actions to prevent stockouts.

Components

Component	User Story
NRT Spike - Inventory KPI - Items Near Stock Out	US172485
NRT Spike - Sales KPI - Sales Summary	US175075

Component	User Story
Inventory KPI - Items Near Stock Out - Update UI and backend to expose Stock Level Analysis column	US174201
Inventory KPI - Items Near Stock Out - Extend references to tblItem to cater for Stock Level Analysis Column (Inventory item master import)	US174291
Inventory KPI - Items Near Stock Out - Create new config and SM task	US175078
Integration for NRT Event Bus	US174188
Inventory KPI - Items Near Stock Out - Create logic for sending Items near stock out	US175846

Configuration Settings

- A new setting exists on MMS_HO_ConfigurationManager.aspx: Inventory -> Inventory Items -> NRT - Near Stock Out Item Send Limit. Set default value to 50 items.

TECH: Cube Security Enhancements (F19865)

Release Version	Change Type	Module(s)
<u>2023.4 Release</u>	<u>Enhancement</u>	<u>Reporting</u>

Summary

The company password policy to the dev.macromatix.com domain was implemented on Tuesday, December 6th and this policy will match what we're using in our other Active Directory domains and will enforce password rotation for user accounts every 90 days.

Service accounts were identified (administrator account, MxDeploy, web users, cube users etc.) and added to a separate Activity Directory Organization Unit where the password policy was configured to be ignored and all but the administrator account had its logon disabled.

Since the Cube Users are created automatically by Server Manager, these Cube Users need to be added to the Organization Unit (OU).

The long term solution is to implement password rotations using a secret management service (to store & validate the passwords) and negate the need for a OU with the password policy disabled.

Components

Component	User Story
Cube Security - Add user to Active Directory Organisation Unit and under a different Container	US153560

Core

Rename “Global Profile” to “Fourth Account” (F21529)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Mobile, Core</u>

Summary

Terminology Alignment:

- Hot Schedules Labor, Mobile, and potentially MX adopted the term "Global Profile" within Fourth Accounts and this terminology was inconsistent with other products internally and externally.
- The aim is to modify the on-screen display and documentation to replace "Global Profile" with “Fourth Account” and have a standardized term across all Fourth products.

Consistent User Experience:

- To ensure uniformity in terminology for all Fourth Account users across different Fourth products and services. Consistency in terminology guarantees a smoother and more coherent user experience, eliminating confusion due to varied terminology.
- Minimizing potential confusion by establishing a unified language across all Fourth products and services, facilitating smoother communication and operations.

Components

Component	User Story
Rename “Global Profile” to “Fourth Account”	US168570

[MX] Mobile Splash Page Phase II (F23312)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>New Feature</u>	<u>Mobile, Core</u>

Summary

This release introduces two changes to the Splash page:

A Splash page link is now available in the Report section of the Mobile menu. This addition enables users to manually access the splash page to review its information.

The Mobile Splash page has been upgraded to support the display of images, enhancing its visual capabilities.

The changes were implemented to improve user accessibility and enhance the visual appeal of the Splash page within the Mobile platform. Adding a direct link in the Report section enables easier access for users interested in reviewing Splash page information, while the enhancement allowing image display aims to enrich the visual content and overall experience for users interacting with the Splash page.

Components

Component	User Story
Add Link to Splash Page to Menu in Mobile	US174204
Mobile splash page can't display images	US171471

[MX] Mobile Cash and Workflow - Warranty (Q4 2023) (F22523)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Mobile, Core, Financial</u>

Summary

Fixing defects and filling gaps in Mobile Cash Management, Mobile Workflow

As part of our company's mobile strategy, the R&D team recently created the new cash management modules in the MacromatiX mobile solution. However, during the conversion process from the legacy ASP.NET Core | Open-source web framework for .NET pages to the mobile solution, a significant number of defects and gaps emerged between the existing functions in the MMS and the new functions in the mobile solution. As a result, it is currently not possible to release the new Mobile Cash features to both existing and new customers. To address these issues, the Shanghai team has been tasked with fixing the defects and filling the gaps in Q2 2023.

Components

Component	User Story
[Defect] Banking Deposit - Unable to sort in Completed tab.	US171169
Back to Daily Recon page.	US172699
[Defect] Banking Deposits - After authorizing daily recon, total of cashier deposit will be 0	US173313, US174549
[Defect] Workflow - When click completed tab, collection task will turn to unselected status	US173150
[Defect] Workflow - when click deposits on daily recon, daily recon task can not be selected	US173348
[Defect] Petty cash - After authorizing daily recon, mobile petty cash can not add petty cash, mms can add petty cash	US173289

[Defect] Workflow - when select safe drop task, deposit collection task will also be selected	US173072
[Defect] Report - can not load Particular Report from mms Workflow	US171489
Cash Recon - Enable Settlement Data Process Method	US171334
[Defect] Cash Recon - click "shift list" to return to parent page, unsaved message will pop up	US171660
[Defect] Banking deposit - Confusing warning message displayed in completed deposit detail page.	US171125
Banking Deposit - Deposit page remain Gaps	US171171
[Defect] Petty Cash - Can not create petty cash with 0 amount	US171645
[Defect] Banking Deposit - Collection data is not stored in DB correctly.	US171783
Banking Deposit - Refactoring complete tab code	US173151
[Defect] pin icon can't display well when open cash count window of safe count	US173211
[Defect] Banking deposit - transaction date and business day will move and F12 console error happen when create deposit	US173755
[Defect] Banking deposit - completed tab can not display in full in Android pad portrait mode	US173702
[Defect] Banking deposit - 2 colons display in dispatch window	US173315
[Defect] Daily Recon - Daily recon variance color rewrite	US173265
[Defect] Daily Recon - When write comment over 255,500 occur	US173278
[Defect] Banking deposit - Some data is not stored in DB correctly.	US171163

[Defect] Banking deposit - Envelope/Bag No can not be displayed on authorize window of deposit collection	US171395
[Defect] Daily Recon - Daily recon page gets deposit data by Dispatch mode only	US173263
[Defect] Banking deposit - When do 3 collections, completed tab will only display one collection	US171405
[Defect] Banking deposit - When view the completed deposit of collection mode, date can not display correct	US171337
[Defect] Safe Count - Duplicate BankingTypeID when open MMS but authorized in Mobile	US171537
[Defect] Workflow - pending tab will be displayed when collection task selected completed tab	US171532
[Defect] Petty Cash - Can not create if configuration 'Petty Cash - Input By Cashier' is set to none	US171644
[Defect] Cash Recon - The last column is blank on Step 2	US171782
[Defect] Petty Cash - Default Transaction Date should use selected business day	US171900
Go To Deposit w/ Dispatch disabled from Workflow, can still select deposits	US172648
Workflow Issues	US172668
Period Close check in Cash Management	US170745
[Defect] Cash recon - Authorize button will not be enabled after released	US173260
[Defect] Banking Deposit - After banking closed, should not allow user to create deposit.	US173314
[Defect] Petty cash - After authorized daily recon, unauthorized petty cash can be modified on MMS, but mobile petty cash can't.	US173314

[Defect] Petty cash - After authorized daily recon, unauthorized petty cash can be modified on MMS, but mobile petty cash can't.	US174219
Not All Nested Financial Groups Are Displayed In MXConnect	US171612

Reporting

[MX] Mobile Store Report Page Phase II (F23002)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>Mobile, Reporting</u>

Summary

In this release, there are multiple changes to the Mobile Report page:

1. Introduction of Report Permissions in Mobile, granting users access only to reports they're authorized to view.
2. Enablement of report generation directly from the Mobile report page or the option to send reports to the download center.
3. Addition of an option on the Mobile report page to facilitate report generation with a Refresh option.
4. Enhancement of the Mobile report page to accommodate a broader range of report parameters, expanding the variety of reports that can be generated from this platform.

MacromatiX currently operates with two systems: the legacy MMS Desktop solution and the modern MxConnect Mobile solution. Restaurant users currently need to switch between these two systems to carry out their daily tasks. In order to streamline and simplify the user experience, we are in the process of moving all store functions from the legacy MMS Desktop solution to the MxConnect Mobile solution. As part of this effort to make the transition to the mobile solution smoother for our customers, we have also been asked to migrate the Report Page feature to the mobile platform.

Components

Component	User Story
Add option to generate report with refresh	US173809
Allow reports to be generated from the report page.	US173808
Add report permission	US173811
Support more store report in the mobile report page.	US173810, US174331,US174992

RDS

DBE Database Optimization (F21614)

Release Version	Change Type	Module(s)
<u>2024.1 Release</u>	<u>Enhancement</u>	<u>RDS</u>

Summary

Database Optimization:

1. Transaction Table Index Optimization:

- Executed index change optimizations on transaction tables aimed at reducing the number of indexes. Specifically, targeted optimizations for EntityID and Business Day indexes to enhance query performance and reduce database overhead.

2. Denormalization and Covering Indexes:

- Implemented denormalization strategies across relevant tables and introduced covering indexes. This approach streamlines data retrieval, enhances query speed, and reduces the need for additional join operations, thereby improving overall database performance.

Reporting Optimization:

1. Report Optimization Strategies:

- Tailored optimizations for specific reports to improve their performance. This included optimizing queries, restructuring data retrieval methods, and refining report generation processes to expedite report rendering and improve user experience.

2. Migration to SQL-based Reporting:

- Transitioned certain reports from a service-based approach to SQL-based reporting. This shift helps leverage the power of SQL for faster and more efficient report generation, enhancing reporting performance across the system.

3. Mobile Report Enhancement:

- Addressed the performance impact of the 'item selector' control within reports, aiming to optimize its functionality for smoother rendering and improved performance on mobile devices.

Cube Optimization:

1. Rewriting Cube Functionality:

- Undertook a comprehensive rewrite of cube-dependent functionalities. This involved refining cube structures, optimizing aggregation processes, and enhancing cube-based operations to streamline data processing and improve performance for cube-dependent functionalities.

These optimization initiatives spanned database restructuring, reporting methodology enhancements, and cube-dependent functionality improvements, all aimed at significantly improving system performance, query speeds, and overall user experience.

Components

Component	User Story
SPIKE: Review default indexes on transaction tables	US164265
SPIKE: Review RDS queries and procedures for performance tuning	US164266

2024.1 Release Bug Fixes and Rapid Response/DTZ

MacromatiX Desktop (MMS)

- Specialized - Core - Bug on Fix D79714 - Multi Store User Recieving Order (D86562)
- MMS_HO_InvoiceReconciliation2: Error on Combine 2 invoices (D91750)
- MMS_HO_InvoiceReconciliation2: Console error on Save/Update invoice or Authorization (D91742)

Mobile (MxConnect)

- Mx Mobile - 2022.4 - Receive order - correct price does not allow decimals in the number (D88313)
- [MX] - Mobile Reporting - Access Denied to Mobile Report Page (D90002)
- Getting error when generating order detail report from order history page (D90326)
- Report Cash Reconciliation Financial subgroup will display twice on report (D86957)
- MX- Inventory Order - The columns can not be aligned in place order page (D85371)
- Banking Close comment missing (D91009)
- Cash recon click refresh sales can't update register sale and transaction count and so on. (D91655)

Cloudlink

- CloudLink Symphony - Cancelled Sales - Fixing SaleId mapping from API to use chkNum instead of guestCheckId (D88955)