

LS Central (21.0-21.5)

Release Notes

April 20, 2023

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LS Central 21.5 Release Notes

About This Release

Released - April 20, 2023

This version is built on Microsoft Dynamics 365 Business Central 2022, release wave 2, cumulative update 5, 21.5.53619.53819.

"Important Notices! " on page 1

"New or Enhanced Features" on page 4

"Fixed Issues" on page 10

"Hotfixes" on page 13

Important Notices!

For information about breaking changes in previous releases, click [here](#).

Deprecation of Windows Authentication for Web Services in LS Central version 22.0

Windows authentication is currently one of the authentication methods used for web service authentication in LS Central. The Windows authentication is based on Business Central Windows Authentication code. The Business Central Windows authentication code is marked as OnPrem and can therefore not be used by applications where Target=Cloud in the app.json file. Setting Target=Cloud is a requirement to make apps Universal Code Compliant.

Therefore, the option to use Windows authentication for web services will be removed in LS Central version 22.0. This does not effect SaaS customers as the only authentication method supported in SaaS is OAuth authentication. On-premises customers must switch from Windows authentication to either Basic authentication (Web Service Access Key) or OAuth authentication before upgrading to version 22.0.

Upgrading to the New Comments Module

If you have been using dining reservations and Bookings, you must go to **Comment Setup** and follow the steps required to move existing comments to the new structure. The potential size of the database tables involved makes the upgrade process not feasible for this purpose. The upgrade process takes care of moving existing Hotels comments to the new structure.

For more information see the [LS Central Help](#).

Changes to Primary Keys in Essential Tables in Hotels

Changes to primary keys affect the following tables, a period (.) was added after the table name:

Table	Replaced by
LSCHT Detailed Rev Entry	LSCHT Detailed Rev Entry.
LSCHT Hotel Res. Entry	LSCHT Hotel Res. Entry.
LSCHT Res. Payment Entry	LSCHT Res. Payment Entry.
LSCHT Room Blocking Entry	LSCHT Room Blocking Entry.
LSCHT Room Type Block	LSCHT Room Type Block.
LSCHT Detailed Rev Entry Log	LSCHT Detailed Rev Entry Log.
LSCHT Reservation History	LSCHT Reservation History.
LSCHT Hotel Reservation Log	LSCHT Hotel Reservation Log.

To support localization of VAT %, the system now uses temp Sales Header (Document Type Quote) and Sales Line to get the Detailed Revenue Entry VAT%.

Obsolete Code Marked With Tag 19.0 and Below Removed

Our solution gets bigger with every release, but we intend to clean up by removing obsolete code in major releases as soon as the code has been marked obsolete for at least a year.

In release 21.0 we removed constructs like procedures and events, but there are no breaking schema changes yet, like Tables and Table fields.

Recommended action: Check if you are using a feature that has been marked obsolete for more than a year. The warning should state the reason and the alternative that is intended to be used.

OnPrem-only Procedures Are Now Obsolete

All procedures and objects that are marked `#if _IS_SAAS_`, previously marked `[Scope('OnPrem')]`, will become internal.

From 21.0 these procedures and objects will be marked *Obsolete* for OnPrem extensions, until they will finally become internal in 22.0.

If your extension is using any of these, they will now get a warning.

Recommended action: If you have an OnPrem extension, check if there are any warnings. Usually, there are alternative procedures available,

but partners can also request that a list of these is made public through the same flow as event requests.

Autotest Object Names Now Have an LSC Prefix

In version 17.4 we added an *LSC* prefix to LS Central, but this was not done for our Autotests extension, which we include in our releases.

From version 21.0, autotests will have a prefix as well.

Recommended action: If you are using or extending the LS Central Autotests extension, be aware of this change.

Integration Event Triggers Are Now Internal/Local

In rare cases, it has been technically possible to trigger some of our events from an extension.

These cases are usually an oversight, since the internal/local keyword was missing for the IntegrationEvents so they became public, by default.

This has prevented us from adding new arguments to existing events, and therefore unnecessarily forcing new versions for events where a breaking change would not have been needed.

Recommended action: This should not require any work. There is a chance that somewhere an upgrade might fail, if it is calling an event function, for example in POS Transaction Event, which usually has no effect. Instead, the events are intended to be subscribed to, with an EventSubscriber.

Click [here](#) for a printable version of this notification.

OAuth web service authentication

As documented by Microsoft, **OAuth2** is the authentication option for Business Central SaaS and Basic authentication has been deprecated, see [here](#):

Changes in 2022 release wave 1 (version 20.0)

Web Service Access Keys (Basic Auth) for Business Central Online

The following feature will be Removed with Business Central 2022 release wave 1.

Removed or Replaced?	Why?
Removed (online only)	The capability to access web services in Business Central using Web Service Access Key (Basic Auth) is deprecated for SaaS. OAuth2 will be the authentication option for SaaS. OAuth samples are published in the BCTech repo . For more information, see Using OAuth to Authorize Business Central Web Services (OData and SOAP) . For on-premises, Web Service Access Key (Basic Auth) will remain an option for the time being. This change has no impact on how Business Central connects to external services.

LS Central version 21.5 supports the use of Service2Service OAuth2 authentication when using LS Central as a web service client, for example when POS (web service client) is calling web services on Head Office (web service server).

New or Enhanced Features

LS Central

LS Central

Cloud Compliance and Certificates

Transaction Signature and License Manager have been made cloud compliant. **LSC Password** field has been added to the **Certificates** page.

Identifying Lowest Price in a Given Period for an Item per Store

A new check box, **Item Price By Period**, has been added to the **Retail Setup** page to activate this feature. When activated, enabled Periodic Offers and Promotions are processed and prices are added to the Price History table.

A new page, **Item Prices by Period**, can be accessed from the **Retail Item Card's History** menu. This page shows the Item prices up to the last 90 days. It shows a chart and a list highlighting the lowest price. The page is separated into two parts, the first one shows the Item's regular price history and the second part shows prices from Offers and Promotions that were active during that period. The prices are added to this list when the **Enable** action on the **Offer/Promotion** page is triggered.

The Offer/Promotions part only covers Promotions, Discount Offer, Line Discount Offer, Total Discounts and Tender Type Offers.

Deals, Multibuy, Mix&Match, Item Points Offer, and Member points offers are excluded.

Offers/Promotions targeting members (that is with the **Member Type/Value** fields populated on the card) are excluded.

New Action Syntax in BC 21

- Converted promoted action to new syntax with AL code action.
- Removed promoted action from unsupported page types (ListPart, CardPart, NavigatePage, RoleCenter).
- Added pragma to disable warnings on obsoleted actions on the new promoted syntax.

POS

Date & Time Picker Improvements

The **Calendar** panel now has translated weekdays and can switch between a day, month, or year view to make it easier to go farther back or forward in time.

Replenishment

Default Setting Changed in Replen. Item Store Rec. Preview Page

The **Override Replen. Item Store Rec.** setting in the **Replen. Item Store Rec. Preview** page has been changed to *disabled* by default.

Store Stock Redistribution Procedures Moved to a New Codeunit

As part of the initiatives to improve the maintainability of codeunits and to reduce object sizes, all the Store Stock Redistribution related procedures and integration events have been moved from the **LSC Replen. Calculation** codeunit to the new **LSC Redist. Calculation** codeunit.

Restaurants

New Interface to Send to KDS Codeunit

A new codeunit, *Send to KDS Interface*, has been created with two functions, *SendReceiptToKDS* and *SetFromWebService*.

Shopify

Improvements

The following improvements to Shopify have been implemented:

- Extra Location mapping to map extra Shopify Location to receive Inventory status.
- Support for Shopify Payment webhook when posting Sales Orders.
- Support for partly fulfilled orders.

LS Central Modules

Bookings for LS Central

Adding Selection of Resources When Setting Up Capacity Scheduled Products

This feature is mainly to make it easier for the user to schedule activities with limited capacity and which need additional resources, for example boat tours where you also need to reserve the boat and the captain.

Features were added to the **Product Schedule** page to add two resources to the schedule date, to be set unavailable. When the resources are reserved with the page action **Reserve Resources**, the system creates the unavailability entries for the related resources and displays them in the additional resources section.

Note: The unavailability section shows all entries, when you place the cursor on a schedule line with no dates, but otherwise the unavailability section is always filtered to the related schedule line.

Bookings APIs Moved to REST

All Bookings API procedures have been moved to a new codeunit, *LSC Activity WS*, and adapted as REST services. To enable, use the **Web**

Services action in **Activity Web Setup**.

See the [LS Central Help](#) for more information.

Comment Action Added

A **Comment** action has been added to the **Archived Activity Group List**, the **Archived Reservation** list and card, and the **Archived Activity** list and card.

Non-editable comment part views were added on the **Archived Reservation Card** and the **Archived Activity Card**.

Note: If you archive entries that were created before the new comment mechanism was implemented, you might get an error when you open the comment cards in archiving. However, this should not happen with new reservations or reservations going through the upgrade codeunit mechanism.

Copying Information to Activity Reservation from a Template

When using the **Copy From** action in the **Reservation Card**, a dialog window is displayed where users can define which parts of the source reservation they want to copy, and which reservation type to use to filter the selection of source reservation. These settings are then saved per user, so that next time the user opens the dialog window, the settings are displayed.

Deposit API for Activity (REST)

Two new API functions were added to Activity Web Services: *PaymentDeposit* and *PaymentRefund*.

Function Made Accessible for Partners

The function **InsertMemberDepositAccount** is now accessible for LS Retail partners.

Linking Additional Items to Activity Quantity or No. of Persons on Activity Product

A new field, **Additional Items Multiplier**, has been added to the **Activity Product Card**. This is the default setting now when adding new items to the additional charges, during reservation entry.

Also the field **Quantity Multiplier** in Activity Additional Charges is now editable. This is mainly used for event related products where you would like the quantity to follow the number of persons assigned to the activity. The Group entry is not affected by this setup, and remains the same.

Location Added to Event Category Responsibilities

Location field has been added to the setup of event category responsibilities. If location is left blank, the responsibility is applied to all locations, but otherwise to the specific location. The same employee can

be set up in multiple locations, or a blank location can be used to assign the employee to all locations.

This setup is used when the user creates a reservation and the system pre-populates the responsibilities for the reservation according to reservation type.

Opening Matrix View from a Reservation

A new option was added for the user to open the matrix view from the **Reservation Line** page (from the **Reservation Card**). Creating a new activity in the matrix view now results in an activity being added to the current reservation.

Staff Manager Role Center: Process Moved from Top Menu to Bookmark Section

The **Salary** process has been moved to the role center's bookmark section. All tooltips in the role center were reviewed.

Hotels for LS Central

Hotels for LS Central is a separate app extending LS Central.

Accrual Accounting Night Audit Process

The Accrual Accounting now creates Gen. Journals and posts every night to Sales and VAT accounts for InHouse reservations. Otherwise, the night audit process creates Gen Journal and posts to Temp Balance for InHouse reservations.

The Detailed Revenue Entry table now stores the Document No. of the General Journal Posting and can be used to view transactions posted by Night Audit "Hotel Setup". "Night Audit Customer No." is now always used in the Night Audit process.

Improved error handling and error logging.

The Night Audi processes:

- Non-Inventory items from Reservation Extra
- Activities that are included in rate
- All confirmed Activities
- Cancellation fees
- Charged2Room items are not processed.

Adding Payment to One Reservation from Another

A new action, **Balance Transfer**, was added to the **Hotel Invoice Management** page, which allows users to arrange transfers of balance from one reservation to another.

This action is available for reservations with internal status *In House* or *Confirmed*. The balance can not exceed the balance of the receiving reservation.

A new field, **Balance Transfer Item No.**, has been added to **Hotel Setup**. The item number that is set here is the posting item behind the DRE lines created in the balance transfer process.

Availability Check for Activities Included in Rate Code Before a Reservation Is Created

A new field, **Min Res. Act. Availability**, in **Hotel Setup - default values**, has been created to define the minimum availability for a Reservation Activity.

A new check was added in the confirmation process to verify sufficient availability for reservation activities. If the check does not pass, a confirmation dialog window asks the user whether to continue or not.

A new action has been added in the **New Reservation** page to see availability for all reservation activities.

Item Filter in Hotel Setup

A new item filter has been added to Hotel Setup to filter items shown in the **Reservation Extra** page.

New Fields, Store No. and Terminal No., Added to DRE for Room Charge Transaction

Two new fields, **Room Charge Store No.** and **Room Charge POS Terminal No.**, have been added to the Detailed Revenue Entry table and related page. The fields populate Store No. and Terminal No. where the charge comes from.

Reservation Builder: Create Draft Reservation and Generate Rate Prices for Reservation

A new reservation framework has been implemented to work with reservations in draft mode.

Use the Reservation Builder CU to get prices with discounts and to work with "Reservation Extras", Activity, Comments, "Guest List" while the reservation is in draft mode. Confirm reservations uses values in those tables including the price changes.

Reservation Payment Type Changed to Hotel Payment Type

"Reservation Payment Type List" has been changed to "Hotel Reservation Payment Type List".

Reservation Type Added to New Reservation Card

Reservation Type has been added to the **New Reservation** page.

Rounding Derived Rates

New fields, **Derived Rounding Type**, **Derived Rounding Precision**, and **Derived Decimal Places** have been added to the **Rate Code** page and **Hotel Setup**. The fields let users control how rounding on derived rates is done. These fields are only visible on the **Rate Code** page, if this is a derived rate and the offset type is percentage.

Pharmacy for LS Central

Pharmacy for LS Central is a separate app extending LS Central.

Performance Updates in AL

Performance updates from C/AL have been implemented in AL:

- Only send relevant fields in Payload for e-prescriptions.
- Minor updates to the **Customer Panel**, do not update the panel when closing downloading e-prescription.
- Do not update Web Templates 2x when opening the **Prescription Details** screen.

Supporting Functionality

Hardware Station for LS Central

Hardware Station Naming Aligned With LS Central Rebranding

The LS Hardware Station name has been changed to **Hardware Station for LS Central**, where possible, in accordance with the latest LS Retail rebranding initiative. In some places, like in the name of the service, the name has not yet been changed since it affects other software such as the Update Service.

Other

POS Commands

The following POS commands are new in LS Central 21.5:

DTP_MODE	POS Calendar: Toggle through calendar modes.
DTP_NEXT	POS Calendar: Get next Month/Year, depending on calendar mode.
DTP_PREV	POS Calendar: Get previous Month/Year, depending on calendar mode.
DTP_RESET	POS Calendar: Go back to the date that was set on the input which opened the Calendar.
HYPERLINK	Uses the parameter as a URL it should open (by using the standard Hyperlink method in AL).

See [POS Commands](#) in the LS Central Help and the corresponding [Excel list](#) with filters for a complete list of POS commands.

Fixed Issues

LS Central

LS Central

Blob Support Added to POS Trans. Data Push Utility

Code was added to send Blob Data with DD WS job data (DD Send) for subjob controlled data push.

Canceling Customer Order: Sales Line not Found Error

This has been fixed. Sales line lookup is now always based on Price with VAT after Sales Order price handling was changed.

DD Replication Error

DD picked the wrong session when sending a DD job. This has been fixed. The correct session is now picked for Source Host when sending Replication Jobs to DD.

Deleting Customer Price Group

An error occurred when deleting Customer Price Group. This has been fixed.

Fashion

Missing Global Dimension 1 and 2 Codes When a Prepack Item Is Exploded

When a prepack item was exploded via purchase or transfer receipts, the **Global Dimension 1 Code** and **Global Dimension 2 Code** were not populated in the related positive and negative adjustment Item Ledger Entries. This has now been fixed.

Franchise Module

Improvements

- Refactor Archive of Processed messages.
- Validate for PO line "Qty. to Receive" (Base) was removed when processing incoming updates for PO.
- SO Release was removed when processing incoming SO requests.
- Fixed *'This order is a Franchise order. Inconsistency with.....'* message appearing when F7/Statistics was pressed in PO. The message should not have been displayed.

POS

Menu Button Issue in Menu Properties

An issue causing the removal of a button from the Menu Properties to not update the POS UI has been fixed.

ReplEcommMixAndMatch Does not Return All Mix & Match Offers

Table **LSC WI Mix & Match Offer** has been replaced with table **LSC WI Mix & Match Offer Ext**. This is done to be able to change the table's primary key. The field **Priority** has been added to the new table's primary key and the old table has the **ObsoleteState** as *Pending*.

Note: Run Scheduler job **COMMERCE_INIT** to regenerate data for the new table.

Replenishment

Issue with Committed Purchases Records Deletion

An issue where the records in the **LSC Committed Purchases** table are not being deleted when their relevant Purchase Orders are posted, has now been fixed.

Invalid Special Group Code Filter Field Length in Replen. Item Quantity

The Replenishment Journal was unable to support a **Special Group Code Filter** of more than 10 characters, caused by the field having an invalid field length of Code[10] in the **LSC Replen. Item Quantity** table. This field has now been obsoleted and replaced with the new **Special Grp. Code Filter** field, assigned with the correct field length of Code [20].

Restaurants

Item Scanning not Working in Self-Service Kiosk

Scanning an item in the Self-Service Kiosk did not work. This has now been fixed.

Image Selection on POS Web Templates not Working for Self-Service Kiosk

Images are assigned to Web Template Image Lines and Language Profile Lines through Retail Image Link. Upgrade was provided that moves the now obsolete Retail Image Code from these two tables to Retail Image Link.

Store Item List Sorting Issue

If the **Store Item List** was sorted by **Item No.** in descending order, items disappeared from the list. This has been fixed.

Unable to Send BLOB via DD Send

Code was added to send Blob Data with DD WS job data (DD Send).

Web Request Get Table Data Add Last Key

Added WS Table Record Buffer holding the last primary key of the returned dataset.

For this to work, setup for Web Request GET_TABLE_DATA (version 1.0) has to be updated:

In the response xml, add table LSC WS Table Record Buffer at the end as optional and the field Key. This buffer will then return the correct primary key for the last record in the search dataset, which will then become input into next call.

Level	Node Type	Source Type	Source	Node Name	Optional	Alias Source Name	Comment
3	Normal	TableDyn	Table_Data	Table_Data	Yes	No	
3	Normal	Table	LSC WS Table Record Buffer	WS_Table_Record_Buffer	Yes	No	
4	Normal	Field	Key	Key	No	No	

LS Central Modules

Bookings for LS Central

LSC Activity Attributes List Removed from Search

LSC Activity Attributes List was removed from the search, because it is a subpage.

Rental Enhancements and Fixes

There was a bug in selling rental services at the POS when multiple rentals were issued in one receipt. This has now been fixed.

Messages in the renting process have been reviewed and improved, and the process has been made more robust. The **Unit Tracking** page now has updated tooltips.

Pharmacy for LS Central

Barcode not Cleared

Barcode is now cleared, if the wrong pack is scanned in the pick control or the barcode is not found.

Final Control Button not Enabled

The **Final Control** button was not enabled after picking the line in the **Barcode Panel**. This has been fixed. Run LoadWebTemplates on PharmacyPrescriptionPanel2 to update the buttons.

Mismatch in Generated Menu for Customer Panel

Pharmacy Admin Task -> Generate Pharmacy Flex UI now creates a menu with eight buttons in the **Customer Service Panel**.

Prescription Orders in Posting Queue Enhancement

Prescription Orders that have already been picked up and processed at the POS, but are still in the Posting Queue, are now shown in style Subordinate and a new field, **In Posting Queue**, has been added to the BO customer service order list.

User ID Overflow in Pick Control

User ID overflow in **Pick Control**, when the Windows user name exceeds 30 characters, has been fixed.

Hotfixes

See the [LS Central Help](#) for information about hotfixes that have been released since the previous release.

This page is intentionally left blank to ensure new chapters start on right (odd number) pages.

LS Central 21.4 Release Notes

About This Release

Released - March 23, 2023

This version is built on Microsoft Dynamics 365 Business Central 2022, release wave 2, cumulative update 5, 21.5.53619.53819.

"Important Notices! " on page 15

"New or Enhanced Features" on page 18

"Fixed Issues" on page 27

"Hotfixes" on page 30

Important Notices!

Breaking changes in release 21.4

For information about breaking changes in previous releases, click [here](#).

Deprecation of Windows Authentication for Web Services in LS Central version 22.0

Windows authentication is currently one of the authentication methods used for web service authentication in LS Central. The Windows authentication is based on Business Central Windows Authentication code. The Business Central Windows authentication code is marked as OnPrem and can therefore not be used by applications where Target=Cloud in the app.json file. Setting Target=Cloud is a requirement to make apps Universal Code Compliant.

Therefore, the option to use Windows authentication for web services will be removed in LS Central version 22.0. This does not effect SaaS customers as the only authentication method supported in SaaS is OAuth authentication. On-premises customers must switch from Windows authentication to either Basic authentication (Web Service Access Key) or OAuth authentication before upgrading to version 22.0.

Upgrading to the New Comments Module

If you have been using dining reservations and Bookings, you must go to **Comment Setup** and follow the steps required to move existing comments to the new structure. The potential size of the database tables involved makes the upgrade process not feasible for this purpose. The upgrade process takes care of moving existing Hotels comments to the new structure.

Changes to Primary Keys in Essential Tables in Hotels

Changes to primary keys affect the following tables, a period (.) was added after the table name:

Table	Replaced by
LSCHT Detailed Rev Entry	LSCHT Detailed Rev Entry.
LSCHT Hotel Res. Entry	LSCHT Hotel Res. Entry.
LSCHT Res. Payment Entry	LSCHT Res. Payment Entry.
LSCHT Room Blocking Entry	LSCHT Room Blocking Entry.
LSCHT Room Type Block	LSCHT Room Type Block.
LSCHT Detailed Rev Entry Log	LSCHT Detailed Rev Entry Log.
LSCHT Reservation History	LSCHT Reservation History.
LSCHT Hotel Reservation Log	LSCHT Hotel Reservation Log.

To support localization of VAT %, the system now uses temp Sales Header (Document Type Quote) and Sales Line to get the Detailed Revenue Entry VAT%.

Obsolete Code Marked With Tag 19.0 and Below Removed

Our solution gets bigger with every release, but we intend to clean up by removing obsolete code in major releases as soon as the code has been marked obsolete for at least a year.

In release 21.0 we removed constructs like procedures and events, but there are no breaking schema changes yet, like Tables and Table fields.

Recommended action: Check if you are using a feature that has been marked obsolete for more than a year. The warning should state the reason and the alternative that is intended to be used.

OnPrem-only Procedures Are Now Obsolete

All procedures and objects that are marked `#if _IS_SAAS_`, previously marked `[Scope('OnPrem')]`, will become internal.

From 21.0 these procedures and objects will be marked *Obsolete* for OnPrem extensions, until they will finally become internal in 22.0.

If your extension is using any of these, they will now get a warning.

Recommended action: If you have an OnPrem extension, check if there are any warnings. Usually, there are alternative procedures available,

but partners can also request that a list of these is made public through the same flow as event requests.

Autotest Object Names Now Have an LSC Prefix

In version 17.4 we added an *LSC* prefix to LS Central, but this was not done for our Autotests extension, which we include in our releases.

From version 21.0, autotests will have a prefix as well.

Recommended action: If you are using or extending the LS Central Autotests extension, be aware of this change.

Integration Event Triggers Are Now Internal/Local

In rare cases, it has been technically possible to trigger some of our events from an extension.

These cases are usually an oversight, since the internal/local keyword was missing for the IntegrationEvents so they became public, by default.

This has prevented us from adding new arguments to existing events, and therefore unnecessarily forcing new versions for events where a breaking change would not have been needed.

Recommended action: This should not require any work. There is a chance that somewhere an upgrade might fail, if it is calling an event function, for example in POS Transaction Event, which usually has no effect. Instead, the events are intended to be subscribed to, with an EventSubscriber.

Click [here](#) for a printable version of this notification.

OAuth web service authentication

As documented by Microsoft, **OAuth2** is the authentication option for Business Central SaaS and Basic authentication has been deprecated, see [here](#):

Changes in 2022 release wave 1 (version 20.0)

Web Service Access Keys (Basic Auth) for Business Central Online

The following feature will be Removed with Business Central 2022 release wave 1.

Removed or Replaced?	Why?
Removed (online only)	The capability to access web services in Business Central using Web Service Access Key (Basic Auth) is deprecated for SaaS. OAuth2 will be the authentication option for SaaS. OAuth samples are published in the BCTech repo . For more information, see Using OAuth to Authorize Business Central Web Services (OData and SOAP) . For on-premises, Web Service Access Key (Basic Auth) will remain an option for the time being. This change has no impact on how Business Central connects to external services.

LS Central version 21.5 supports the use of Service2Service OAuth2 authentication when using LS Central as a web service client, for example when POS (web service client) is calling web services on Head Office (web service server).

New or Enhanced Features

LS Central

New Centralized Comments Structure for Restaurants, Bookings, and Hotels

With centralized comments you can register comments to a source record in the Back Office and in the POS. A source record is, for example, a dining reservation, a dining table entry, a POS transaction, an activity reservation, or an activity group reservation.

Comments have a **priority** that controls the font style of the comments, making it possible to highlight important comments.

Comments can be assigned **comment categories**. They are an important tool to:

- group comments together.
- assign a default priority to comments.
- link attributes to comments (attributes function as predefined comment options, for example allergies).
- specify whether comments should be sent to the kitchen.

Related Comments

Source records can be related to records in other sources. A dining reservation can, for example, be related to an activity and an activity reservation. The activity reservation may be related to an activity group reservation and other activities. An activity group reservation may have multiple related sources, such as activity group members, activity reservations, activities, and dining reservations.

When you view the comments for a source record, you also see the comments that have been registered for the related source records. This way there is no need to move comments between sources and this ensures that comments are not overlooked, because they were registered to the "wrong" source.

Comments in the kitchen

When a KOT is created for an order that has comments marked to be sent to kitchen (including related comments), these comments are displayed or printed with the KOT. You can also send comments to the kitchen after KOTs have been created.

Upgrading

If you have been using dining reservations and Bookings, you must go to **Comment Setup** and follow the steps required to move existing comments to the new structure. The potential size of the database tables involved makes the upgrade process not feasible for this purpose. The upgrade process takes care of moving existing Hotels comments to the new structure.

Addition for the New Centralized Comments in the LS Central Demo Data Company

With the new Comments functionality, there is a configuration package with all related POS data ready to import into the LS Central Demo Data Company.

The package includes POS setup data, such as POS commands, tags, data tables, panels, menus, data grid, lookup, button pad controls, and fonts.

Note: This data is for profile ##DEFAULT plus the additional POS commands and tags.

LS Retail Partners have access to the package via the LS Retail Portal, [Demo Material](#) (login required).

Default Qty. to Receive not Respected by Retail Purchase Order

When **Default Qty. to Receive** is equal to *Blank* in the **Purchase & Payables Setup** page, and if the item has variants, the fields **Qty. to Receive** and **Qty. to Invoice** cannot be filled.

Mobile Inventory: Cycle Counting Worksheet

The Cycle count filter has been removed to include all lines in *GetInventoryWorksheetBuffer*.

New Web Service: Get Sales History for Member Contact

A new web service to get member contact's sales history has been implemented.

POS

UI-Blocking Functionality on POS While Actions Are Finishing

Usually, when you click buttons in the POS, the buttons are processed by the server and are “non-blocking”, which means you can keep interacting with the POS.

In this release, a new feature was added which enables users to mark POS Menu Lines or POS commands as “blocking”. This means that while they are being processed, the user will have to wait for it to finish. By default, the POS keeps being non-blocking but can be set to “always block” in the **POS Interface Profile**. Visually, this feature is indicated with a loading cursor and the screen gets a little dimmer, until a message is displayed if the action takes too long. The time it takes for the message to appear can also be customized in the **POS Interface Profile**.

Web Templates Created by LS Retail Are Delivered Automatically and Are Read-only

The Web Templates implementation has been changed to facilitate easy delivery and versioning of Web Templates created by LS Retail.

LS Retail Web Templates are now marked as Base and their source code a part of LS Central. This process is automatic, and no actions are needed. This eliminates the use of data packages to deliver the Template code and ensures the Web Template code is always in sync with each release. The Base Web Templates are read-only, but it is possible to extend them by copying the Template code into a new Web Template with a new name and change the source code like before.

If a Web Template is not a Base template, the process is unchanged, the database blobs store the source code, and customers can change the code in any way they like.

In summary:

- Base Web templates are now delivered with the code as a part of LS Central delivery.
- Editing of Base Web Template has been disabled (read-only mode).
- Copy functionality for Web Templates has been introduced to enable users to customize or extend Base Web Templates more easily.
- All Web Templates functionality remains the same. The changes only affect to Base Web Templates delivered by LS Retail.

Replenishment

New Name for Replenishment Role Center

The LS Replenishment Role Center has been renamed **Replenishment Role Center**.

Daily Sales Calculation for Replenishment Calculation Type Stock Levels and Like for Like

You now have the option to calculate the Daily Sales in the Replenishment Item Quantity (RIQ) for items that have been assigned with the Replenishment Calculation Type *Stock Levels* or *Like for Like*. You can enable the option by using the **Calc. Daily Sales for Stock Levels** and **Calc. Daily Sales for Like for Like** settings in the Replen. Setup, and the subsequent setups are just the same as the *Average Usage* calculation type. You just need to assign a Replenishment Sales Profile to the item, or just specify a default Replenishment Sales Profile to be used by all the items.

For more information see [Calculation Type - Stock Levels](#) and [Calculation Type - Like for Like](#) in the LS Central Help.

Validate Changed Quantity in the Replenishment Journal Against the Order Multiple and Transfer Multiple

You can now validate the manually changed quantity in the Purchase and Transfer Replenishment Journal against the Order Multiple and the Transfer Multiple that have been assigned to the item. You can enable the validation by using the **Replen. Journal Quantity Warning** settings for the Order Multiple and Transfer Multiple, available in the **Replen. Setup** page. Once these settings have been enabled, the system

displays a warning when the manually changed quantity in the Replenishment Journal is not in full multiple.

The Order Multiple validation works for the **Quantity** field in the Purchase Replenishment Journal, and the Transfer Multiple validation works for the **Quantity** field in the Transfer Replenishment Journal and the **Quantity to Cross Dock** field in the Purchase Replenishment Journal.

For more information see [Order Multiple and Transfer Multiple Validation](#) in the LS Central Help.

Restaurants

Allow Price Modification of Deals Through eCommerce

It is now allowed to modify the price of a deal when the order is created through the Commerce Service. The deal has to allow price modifications and the web request needs to set *PriceModified* to *True*. This feature is only available through the web services.

Negative Adjustment on Recipes to Statement Posting

The statement-post codeunit has been adjusted to allow negative adjustments also for recipes.

Self-Service Kiosk: Responsive Layouts

The Self-Service Kiosk was designed for the typical fast food ordering screen which is common in portrait mode with the screen resolution of 1080x1920.

Now the Self-Service Kiosk detects the screen aspect ratio and applies styling accordingly. This makes it possible to run the Self-Service Kiosk on a wider variety of hardware.

Shopify Improvements

Fulfillment Rewrite for New API Interface

Fulfillment has been changed to support the latest Shopify API.

Meta Data

It is now possible to send XML data as meta data with the product data.

1. In Shopify Admin, go to Settings - Metadfields - Products.
2. Create meta fields before or after Items have been sent from LS Central. All fields must have name space *lsretail* and content type *Single line text*.

Fixes - Shipping Agent mapping without Shipping Agent Service Code.

Shopify and Magento stores in same Company. When sending web hook messages for Order status, shipping and Payment, Integration Event is used to send those messages to Shopify if store is found in Shopify Administration setup.

LS Central Modules

Analytics for LS Central

New Name for LS Insight

LS Insight has been renamed **Analytics for LS Central**.

Bookings for LS Central

New Name for LS Activity

LS Activity has been renamed **Bookings for LS Central**.

Member Details Updated for All Future Activity Bookings

Now if you change either mobile phone number or email address for a member contact who has an assigned Group Reservation (Main group member), an Activity Reservation, or Activity, the mobile phone number and email address are updated in all future assignments of the related entries.

Note: Only activities that had the same previous phone number or email or a blank phone/email are updated. Phone number is not assigned on any of these entries, only the mobile phone.

New Functions in Activity API "LSC Activity WS"

New functions to update the Reservation/Activity status have been added to the new Activity API, *LSC Activity WS* (Rest supporting). To enable the new API, open the **Activity Web Setup** page, click the **Related** action, and select **Web Services**. The new functions require enabling **Web Service Integration** in the **Activity Setup - Web Integration** FastTab.

Hotels for LS Central

Hotels is a separate app, extending LS Central.

Guest List per Period

A new page has been added that allows users to extract a guest list for a specific period and down to property. The page is available through **Reports** in the Hotel Back Office Role Center.

Improved Discount Page and New Actions

It is now possible to choose a second available discount for reservations. New actions, **Select discount to apply** and **Clear Discount** have been added to the **New Reservation** page.

New actions have also been added to pages **Rate Change** and **Upgrade/Upsell**, so it is now possible to apply or not apply available discounts for a modified reservation.

Nationality Report and Country in Guest List

Country has been added to the guest list and the nationality report has been updated to use data from the guest list instead of the reservation level, only looking at guests that have arrived at the hotel (with reservation status *Inhouse* or *Checked-out*).

A new *AddCountryToGuestlist()* method was added to hotel upgrade codeunit.

New Filter on Hotel POS

The Hotel POS now has a new parameter, OPENPOSTRANS, to the #HTL-FRONTDESK command to show a list of all reservations that have open POS Transactions in the hotel. Double-click a transaction and the POS opens.

Room Type Avail. Info Page Improved

The **Room Type Avail. Info** page has been improved to show occupancy rates by room type and totals by property. In the Property Totals row the accent is:

- Less than 50% - Green (Favorable)
- Less than 80% - Dark Yellow (Ambiguous)
- Less than 100% - Red (Unfavorable)

Pharmacy for LS Central

Pharmacies is a separate app, extending LS Central.

Delete Order / Line and Return to Gateway from Incoming Orders

Incoming Prescription Orders can now be changed from Direct Addressed to normal Prescription in one action.

Incoming Orders Recognizable on Customer Prescription List

Incoming orders are now shown as Favorable (Green) in the **Customer Start Service** subpage and can be confirmed for processing by selecting the function **Confirm Incoming Order** in the **Functions** menu. The **Confirm Incoming Order** function is only available, if an incoming order is in focus.

Pharmacies Commands Cleanup

Used Pharmacies commands are now registered automatically when Pharmacy Admin Tasks are run.

Price Comparison on Generic Substitution

Now you can print a label with the Issued Item information and the Replacement candidates from the **Item Substitution** page.

Supporting Functionality

Hardware Station for LS Central

Improved Print Buffer REST Function

The Print buffer REST function in Hardware Station has been improved with more detailed error messages and better logging.

Other

POS Commands

The following POS commands are new in LS Central 21.4:

COMM_CATEGORY	Lookup Comment Category
COMM_EDIT	Edit comment
COMM_EDIT_OPTION	Change comment option
COMM_LINE	Commands for comment lines in data grid
COMM_NEW	Create new comment
COMM_NEWCATLOOKUP	Create new comment with Category lookup
COMM_NEWOPTION	Create new comment with category and option
COMM_SENDTOKDS	Send comments to Kitchen
COMM_SHOW	Show comments - main grid, related grid
COMM_SHOWSALES	Show comments in Sales POS
PROMOCODE	Promo code entry for Bookings

See [POS Commands](#) in the LS Central Help and the corresponding [Excel list](#) with filters for a complete list of POS commands.

Demo Data Company: New Scheduler Jobs

Three new Scheduler jobs have been added to the LS Central Demo Data Company. The jobs are:

- UPD-MEMBER-INFO - Update Member Information
- UPGR/DOWNGR-MEMBER - Update/Downgrade Management
- EXP-MEMBER-POINTS - Exp. Member Point Entries

The three jobs are doing the same as actions in Member Process Order Entry.

LS Central Help: Rebranding and Restructuring

Rebranding in the LS Central Help includes the changes listed below. Note that the Help uses the short form of module, app, and functionality names:

	Old name	New name (short version)
LS Central Modules	LS Activity	Bookings
	LS Insight	Analytics
	LS eCommerce	eCommerce
	LS Forecourt	Forecourt
	LS Hotels	Hotels
	LS Pharmacy	Pharmacies
	LS Staff Management	Staff Management
Consulting Modules	LS Duty Free	Duty free add-on
	LS Cruise	Ferry add-on
LS Central Apps	LS Central AppShell	AppShell
	LS Retail Mobile Inventory	Mobile Inventory
	LS Retail Mobile POS	Mobile POS
Supporting Functionality	LS Commerce Service	Commerce Service
	LS Data Director	Data Director
	LS Hardware Station	Hardware Station
	LS KDS	Kitchen Display Service
	LS Update Service	Update Service

See [Product Overview](#) for details.

Note: This structure is also reflected in the organization of the LS Central Release Notes, version 21.4 and onwards.

The LS Central Help is currently being updated to comply with the company's rebranding of product, module, and app names. The rebranding is most noticeable in LS Insight becoming **Analytics** and LS Activity becoming **Bookings**.

In the navigation menu, the Help topics are now divided into four main groups, the same as in the [Product Overview](#).

Section	Description
LS Central	Contains help topics for LS Central Base , including BackOffice, Point of Sale, Replenishment, Restaurants, and more.
Modules	Help for Analytics, Bookings, Staff Management, Hotels, Pharmacies, and eCommerce.
LS Central Apps	Help for AppShell, Mobile Inventory, Mobile POS, and ScanPayGo.
Supporting Functionality	Help for Commerce Service, Data Director, Hardware Station, and Kitchen Display System.

Fixed Issues

LS Central

Item Status Check

The order of how Item Status for Item is checked has been changed. Now the system finds the last status and checks if that item is blocked for sale.

New Fields on the Customer Order Setup Now Obsolete

In the **Customer Order Setup** table, the fields **Item Journal Template** and **Item Journal Batch** are not used and have been made obsolete.

POS

EFT Error Recovery Fix

An issue regarding an edge case for the EFT error recovery, where a recovered transaction was not successfully used as payment on the POS, has now been fixed and hotfixes have been created for previous versions.

Issue With Changing a User by Scanning an MSR Card

An issue where changing a user or doing a manager override by using an MSR card was not working properly. This has now been fixed.

Search Bar Issue of Misplaced Click

An issue that caused the click event to click the button in the background of the pop-up grid has been fixed.

Data Table #MPOSTCODE & #MCITY

City and Post Code lookup in the MEMBERCONTACT POS command can now be changed to handle long strings and to populate **County** as well as **City**, **Post Code**, and **Country/Region Code**.

The current **City** and **Post Code** fields are too short to be able to handle long strings, so two new internal fields have been added to the Member Contact table: 5110 - "City Search Internal" and 5111 - "Post Code Search Internal".

These fields should be used instead of the short fields in the POS Data table lines for POS Data table #MCONTACTEDIT for the #MCITY and #POSTCODE lookups. When these lookups are used, values of the **City**, **Post Code**, **Country/Region Code**, and **County** fields are copied to the respective **Member Contact** fields after lookup on #MCITY or #POSTCODE.

No action is required unless you want to be able to handle full-sized strings.

Replenishment

Quantity on Sales Order Issue in Master Child Replenishment

An issue in Master Child replenishment calculation, where the Sales Order's quantity from the Child locations were not considered in the Replenishment Item Quantity (RIQ) calculation of the Master location, has been fixed.

Replenishment Item Quantity Calculation with Replenish as Item No.

When a query was enabled for the Replenishment Item Quantity (RIQ) calculation, its Daily Sales was not considering the sales history of the item that was set up as the **Replenish as Item No.**. This has now been fixed.

Restaurants

Deal With Unavailable Item Brings Up Modifiers

If deal items have current availability 0, an error pops up just after a deal is selected.

POS command AVAILABILITY_MODE shows the status on the button in the <#AVAILABILITY_MODE> tag.

Error Message When KDS Printing Fails

The "KDSStatus" now displays the correct error message when printing fails. The error message is displayed with a banner with a five-minute timeout instead of a field in the POS footer.

Fixes in Self-Service Kiosk

- **Background border around language selection button**
When the flag images used were of different sizes, a border was displayed. This border has now been removed.
- **Recipes with the same ingredient in deals**
If a deal had more than one recipe and the recipes had the same ingredient, it was not possible to exclude the common ingredient from just one of the recipes. This has now been fixed.
- **Start order button fix**
When an order is started in the Self-Service Kiosk on a terminal with only one hospitality type and no language translation selection, the transaction is started directly.

Search Command Issue

Search for Phone No and Name is now possible from Search Command, and it is possible to add a button with POS command HOSP-SEARCHORDER to search by Order No.

Standard vs eCommerce Differences in Discount Calculations

A new field, **Use Bill-to Customer**, has been added on the **POS Functionality Profile Card**.

When activated, the calculation of the Customer Price will use the **Bill-to Customer No.** field on the **Customer Card** to calculate the price, similar to standard Business Central.

LS Central Modules

Pharmacy for LS Central

B2B Prescription Picking Error

A new page for B2B picking control has been added (avoid FMD control).

Dose Label not Correctly Printed from the Pick Panel

Function call has been added to print a dose label from the **Pick Panel**.

Inactive Subscribers

Inactive subscribers have been fixed or removed.

Supporting Functionality

Hardware Station for LS Central

Printer not Reconfiguring Correctly on Retry

An error in Hardware Station has been fixed, where a printer receiving an OPOS error restarted with the default configuration values and did not reconfigure itself until the Hardware Station was restarted.

Hotfixes

See the [LS Central Help](#) for information about hotfixes that have been released since the previous release.

LS Central 21.3 Release Notes

About This Release

Released - February 16, 2023

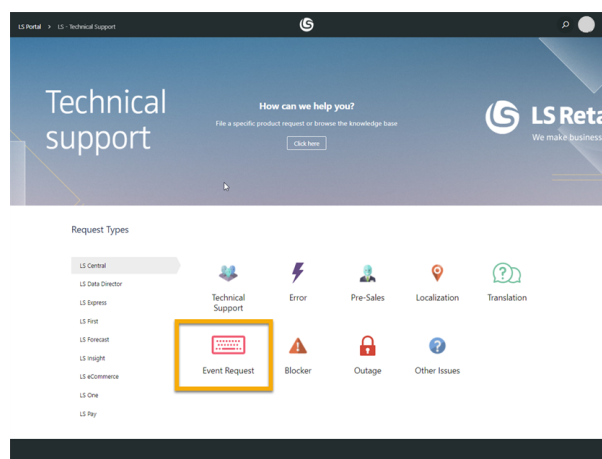
This version is built on Microsoft Dynamics 365 Business Central 2022, release wave 2, cumulative update 4, 21.4.52563.52785.

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It is LS Retail's priority to make it easy for the partners to extend LS Central. Therefore, a special section in our Support Portal (login required) is provided for partners to submit requests for new events. These requests are given priority.



LS Central extension

The release package includes LS Central and LS Central System App as runtime apps that can be installed as extensions. To install the extensions, you first need to publish them, see [Publishing and Installing an Extension v2.0](#). Once the LS Central and LS Central System App extensions have been published, the LS Central and LS Central System App extensions can be installed using the **Extension Management** page in Business Central.

Important Notices!

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Obsolete code marked with tag 19.0 and below removed

Our solution gets bigger with every release, but we intend to clean up by removing obsolete code in major releases as soon as the code has been marked obsolete for at least a year.

In release 21.0 we removed constructs like procedures and events, but there are no breaking schema changes yet, like Tables and Table fields.

Recommended action: Check if you are using a feature that has been marked obsolete for more than a year. The warning should state the reason and the alternative that is intended to be used.

OnPrem-only procedures are now obsolete

All procedures and objects that are marked `#if _IS_SAAS_`, previously marked `[Scope('OnPrem')]`, will become internal.

From 21.0 these procedures and objects will be marked *Obsolete* for OnPrem extensions, until they will finally become internal in 22.0.

If your extension is using any of these, they will now get a warning.

Recommended action: If you have an OnPrem extension, check if there are any warnings. Usually, there are alternative procedures available, but partners can also request that a list of these is made public through the same flow as event requests.

Autotest object names now have an LSC prefix

In version 17.4 we added an *LSC* prefix to LS Central, but this was not done for our Autotests extension, which we include in our releases.

From version 21.0, autotests will have a prefix as well.

Recommended action: If you are using or extending the LS Central Autotests extension, be aware of this change.

Integration event triggers are now internal/local

In rare cases, it has been technically possible to trigger some of our events from an extension.

These cases are usually an oversight, since the *internal/local* keyword was missing for the *IntegrationEvents* so they became public, by default.

This has prevented us from adding new arguments to existing events, and therefore unnecessarily forcing new versions for events where a breaking change would not have been needed.

Recommended action: This should not require any work. There is a chance that somewhere an upgrade might fail, if it is calling an event function, for example in POS Transaction Event, which usually has no

effect. Instead, the events are intended to be subscribed to, with an EventSubscriber.

Click [here](#) for a printable version of this notification.

OAuth web service authentication

As documented by Microsoft, **OAuth2** is the authentication option for Business Central SaaS and Basic authentication has been deprecated, see [here](#):

Changes in 2022 release wave 1 (version 20.0)

Web Service Access Keys (Basic Auth) for Business Central Online

The following feature will be **Removed** with Business Central 2022 release wave 1.

Removed or Replaced?	Why?
Removed (online only)	The capability to access web services in Business Central using Web Service Access Key (Basic Auth) is deprecated for SaaS. OAuth2 will be the authentication option for SaaS. OAuth samples are published in the BCTech repo . For more information, see Using OAuth to Authorize Business Central Web Services (OData and SOAP) . For on-premises, Web Service Access Key (Basic Auth) will remain an option for the time being. This change has no impact on how Business Central connects to external services.

LS Central version 21.5 supports the use of Service2Service OAuth2 authentication when using LS Central as a web service client, for example when POS (web service client) is calling web services on Head Office (web service server).

New or Enhanced Features

LS Central

New Data Type, DataTransfer, in Upgrade Codeunit

Code has been updated to use the new data type *DataTransfer*.

Web Service to Return Member Contact Information

A new web request, *GetMemberContactInfo*, has been created to search and collect member contact information. This web request is based on the OData 4 module. Request and response parameters are in json format. The web request can be published and subscribed as other web request, the only difference is that the subscription process will not create SOAP related data, but only refer to the fact that it is an OData 4 request (see request name space) and the Definition URL is converted to its OData 4 format.

This new type of web requests will be shown and handled by the same pages and actions as version 2. It could be argued that the new types are in fact version 3, but they will remain in the list with web service 2 for the time being.

Food & Beverages

Confirm Finalizing Orders

When finalizing an order on the takeout host (FAB Order), a confirmation message pops up asking if the user wants to finalize the order. This is to ensure that users can cancel, if they pressed the **Finalize** button by mistake.

Webhooks for Kitchen Status

Webhooks have been added for kitchen status changes. Every time the kitchen status changes, a message is sent to the Commerce Service. The Order KOT statuses can be mapped to a user defined status that is to be displayed on the eCommerce site.

KDS

Fields Added to Be Displayed on the Chit on the Kitchen Display

The following fields have been added to the fields that can be displayed on the chit in the Kitchen:

- PhoneNo
- OrderId
- TableNo
- CustomerName

KDS OAUTH - Create a Request for the Web Service

The Kitchen Service can now use OAuth authentication to connect to the Business Central SaaS. KDS now uses REST to connect to the Hardware Station, and KDS now uses the REST Client to access the OData web service protocols. Backwards compatibility with older SOAP services is available down to v.17.0.

LS Activity

Client Name Displayed on Activity Lines in Activity Host

Client name is now shown on activity lines (on the web templates), in the Activity Host. Client name is now shown instead of 'human resource', for reservations that have a reservation type set up to have multiple clients.

Deposit Made from the Back Office in Activity

Previously, it was only possible to make a deposit (prepayment) at the POS in the Activity solution. Now it is possible to make a deposit (prepayment) from a reservation in the Back Office via the **Deposit Schedule** page. A **Deposit** button was added to the existing **Deposit Schedule** page.

Empty Matrix Day View

When the activity user has no default matrix view, a new error message for matrix view is displayed: *Default matrix view setup is missing*.

Itinerary Page

Itinerary page has been added, an overview of all guest activities assigned to a reservation. The **Itinerary** page is accessible from **Activity Reservation** and **Reservation Group**.

Reservation Header Improvements

The functionality where the user changes the reservation dates in the reservation header has been enhanced. Now there is better validation of the date change, and the users are also asked if they want to update the activity line dates accordingly. Note that on course and class products the activity dates will not be changed. Activity times will not be modified.

LS Hardware Station

More Resilient Handling of Config Files

The handling of config files that store the settings of devices in the Hardware Station has been refactored to minimize the read and write of the config files. This minimizes the likelihood of the config files getting corrupt.

The handling of corrupt config files has been changed, so that if the Hardware Station reads a corrupt file, it will regenerate a new one with default settings instead of reporting an error.

LS Hotels

Changes in Split Bill Update Invoice Management

The balance of a reservation can be routed to different invoices in Back Office before check-out. If the routing is changed on the POS (**Finalize Invoices - Split Bill**), from what it was in Back Office, the changes are now reflected in the Invoice Management in the Back Office.

Field Added to Room Type Blocking

A new field, **Enabled**, has been added to the **Room Type Block** table. If set to *true*, the field will take availability from the Hotel Availability table, and if set to *false*, it will not have any affect on hotel availability.

All blockings coming from web services have this field automatically set to *true*. **Hotel Availability** is now accessible through action navigation for quicker access to the affected table.

Filters Aligned in Reservation Page in Back Office and in Front Desk Role Centers

Reservation Cues have been copied from the Back Office Role Center to the Front Desk Role Center to display the same **Views** filters in the **Reservation List** page (Attention, Draft, Arrivals, and so on).

Host Now Assigned to Staff from the Staff List

The *Host* attribute has been moved from Hotel User to Staff. A new **Host** field has been added on the **Staff List** and **Staff Card**. A Host is now assigned to staff from the **Staff List**. Front Desk Cue **Number of Reservations** has been changed to show the number of reservations with Hosts.

The **Host** field has been marked as obsolete, and two fields, **Host ID** and **Host Name** have been created in the **Reservation** table.

Hotel Actions Added to Activity Pages

A new action, **Hotel Reservation**, has been added to the **Activity Card** and the **Activity Reservation Card**, to open related hotel reservations. Additionally, an action, **Hotel Group Reservation**, has been added to the **Activity Group Reservation Card**, to open related hotel group reservations.

LS Recommend

Discontinuation of LS Recommend in LS Central

LS Recommend and its functionalities have been obsoleted. It is no longer possible to get item recommendations at POS terminals.

Staff Management

Staff Management Messages and Comments

The Staff Management module now uses the Retail Message functionality to send messages to a group of employees or individuals. When the employee clocks in, the system checks for messages to that individual, both direct or to the store or terminal. The employee can accept to read the message, and thus the message will be marked as read. The message can also be read by the standard Retail Message functionality in the POS.

Also, the **Employee Portal** now shows the related messages and the employee can mark the message as processed. The Staff Manager role center now has an action to create new messages and also to see currently active messages from a cue.

Note that previously, a simpler message functionality in the Staff Management module had been obsoleted and removed from the **Staff Management Setup**, **Location**, **Employee**, and **Work Location** cards.

Staff No. Enabled in Staff Management Employee List

The second set of the **Employee List** page in the Staff Management has been removed. This page will not show up in the search, and only one list page is now active for the Staff Management employees.

Time registration comes up empty on screen

The **Time Registration** page has been removed from the search results. If partners upgrade their implementations and the old time registration page is shown, an error message is displayed referring the user to set up the new time registration POS panel instead.

Other

LS Central Demo Data Company

The standard new feature **New sales price experience** in Business Central has now been enabled for the LS Central Demo Data Company.

This change has some effects on the **Retail Item Card** and some new functionality in Business Central is now active.

Changes on the **Retail Item Card**:

- The **Unit Price with VAT** field is no longer on the **Retail Item Card**, you find this now in action **Prices & Discounts / Sales Prices** for the retail item.
- **FastTab Pricing** is not there anymore, it has been replaced with action **Prices & Discount / Sales Prices**.
- A new part has been added on the FactBox panel, **Item Price Overview**.

Fixed Issues

LS Central

Handling of Shortage When Using Transfer Orders

Handling of Shortage when using Customer Order - Transfer Orders has been fixed.

Issues With Customer Order Transactions With Non-Inventory Items

- Processing of Non-Inventory items in Customer Order changes has been fixed. Transaction was created with Gross Amount excluding the Non-Inventory item.
- The system has been changed to prevent users from creating a Customer Order that has only items of type *Service* or *Non-Inventory*.
- Processing of Transfer Orders and Customer Orders was tuned.

Issue in LS eCommerce Shopify in LS Central: Members Code Field Length

Processing length for data has been fixed.

Item Templates Do not Update New Items

When entering **Item Category Code** or **Retail Product Group**, the template defined for each field is automatically applied to the Retail Item.

If **Item Category Code** and **Retail Product Group** have different Item templates defined, the one defined in the **Retail Product Group** is applied.

Post Retail Picking Error

If **Default Qty. to Receive** is *Blank* in the Purchases & Payables Setup, the **Return Qty. to Ship** in the Purchase Return Order (create) will be the same as the **Quantity**.

Food and Beverages

Dining Table Locked

The following has been done to make it easier to investigate and fix process problems with dining tables:

If a dining table has an active order that is supposed to be unposted according to the Hosp. Order Trans. Status but is posted, it shows the - with error - status in the POS. When you press it, the pop-up menu includes the Reset function that you select to fix the error. The **Dining Tables** page, under the **Dining Area** page, shows dining tables in red that have some kind of mismatching status.

You can also Reset a dining table in this page, and view the **Dining Table Status Log** that stores information on what was done during the Reset function. The new **Dining Tables** FactBox shows various information links to help with your problem solving.

QR Code Update After Landing Page Change

When a QR code for a table in Dining Area is created and an old QR code already exist, the old one is now removed.

Status on POS When KDS Printing Fails

The **KDSStatus** now displays the correct error message when printing fails. The error message is displayed with a banner with a five-minute timeout instead of a field in the POS footer.

LS Central POS

DateTime Issue When Refreshing POS Browser

If the POS language was changed from the default language (English) and the POS browser was then refreshed, the DateTime was displayed

in English. This has been fixed and DateTime is displayed in the selected language.

Replenishment

Date Formula Translation Issue in Retail Budgets

A date formula translation error that occurred in the Retail Sales and Purchase Budget when the system language is not set to English, has now been fixed.

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LS Central 21.2 Release Notes

About This Release

Released - January 26, 2023

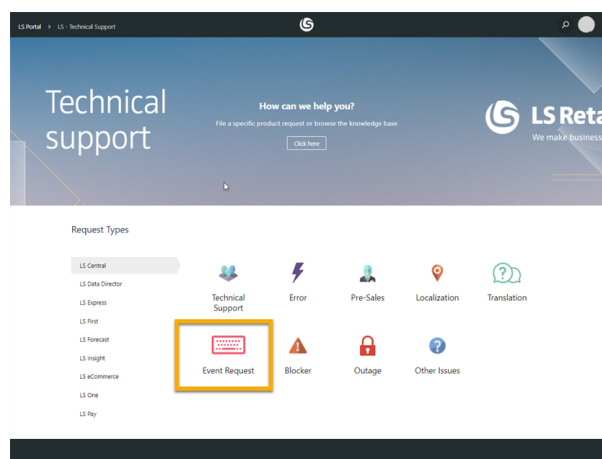
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New or Enhanced Features

LS Central

Franchise Module: Single Shipment Introduced

Single Shipment has been introduced to the Franchise module. A new field, **Single Shipment**, has been added in the partner setup as well as to the Franchise Sales and Purchase processes. Also, an option to send PO and PRO automatically when releasing the PO/PRO has been added.

Shopify Improvements

- Information about missing product mapping has been added in an error message when an item does not exist.
- XML data is now sent as metadata with product data. You can create metadata fields before or after items have been sent from LS Central. All fields should have namespace *lsretail*. and content type *Single line text*. This is set in Shopify Admin, Settings - Metadfields - Products.

Food & Beverages

New Setting for Self-Service Kiosk Currency

A new field, **Currency Code in Kiosk**, has been added in the **Self-Service Kiosk** FastTab in the **Restaurant Card**.

The system uses this field together with the language of the restaurant to select the correct number formatting in the kiosk. Both these fields are now mandatory for using the Self-Service Kiosk, even if the restaurant uses local currency.

Kitchen Display System

KDS OAuth

The Kitchen Service can authenticate to Business Central SaaS using OAuth authentication. The KDS now uses REST to connect to the Hardware Station and the REST client to access the OData web service protocols. Backwards compatibility with older SOAP services is available down to v.17.0.

LS Activity

Activity Manager: Overpayment Message Displayed

The message "Change back in last transaction is Cash <Amount>" is displayed on the POS when users return to Activity Host after guests have paid too much in cash for a reservation.

Cancellation and Deposit Policy Enhancements

The purpose of this functionality is to make it easy to offer that, in case of cancellations, reservation deposits will be used towards future reservations. This is to encourage customers to make bookings despite ever-changing restriction rules.

The member deposits functionality now acts as temporary "storage" for deposits in case of cancellation, which are then automatically pulled into a new reservation to the same client or member when a new reservation is confirmed. This makes for seamless transfer of deposits from canceled reservations to new future reservations, even if done via web bookings.

Deposit Amount Displayed in the Activity Web Template

Now the deposit amount is displayed for each reservation on the web templates in the Activity Host.

Editing Group Line Package Times

The user can now edit Package component times in a Group Reservation line. For example, if a user needs to adjust activities' starting time within a package, this can now be done simultaneously for all

group members, whereas previously the user had to open every group member's reservation to edit the start time of activities within a package.

Enhancement in Updating Group Header Status

The handling of how group header status is updated, when a group line status is changed, has now been enhanced, and a new setup, **Group Status Handling**, has been added to the **Status Setup** card.

This setup has four options:

- *Default* - when group line status is changed, only draft or confirm will update the header status.
- *No Header Update* - the Group Reservation header is not updated.
- *Header Update* - the Group Reservation header is updated with the new status.
- *Prompt User* - prompt the user, if the Group Reservation header status should be updated.

Note: When status is changed from the main action pane (on the **Group Reservation** card), the Group Reservation header status is always updated. For developers and partners, published events have also been added to this process for easy custom changes on when the header is updated or not.

Event Reservations Enhancements

Now when users change the total number of persons (in the **Persons** field in the **LS Reservation** card), they are asked if they want to change all related drafted activity lines accordingly. The change is only assigned to activity lines that have status *Draft* and have an activity product that allows "no. of persons" assignment.

Note: Normally, this field is only visible and editable on event related reservations.

Functions Added to Hotel Integration

Functions have been added to the hotel integrations codeunit.

Matrix Day View: Error Message

In the **Activity Matrix View**, when users try to book an activity that lies in the past, the system now notifies the user with a message that this is not possible. In prior versions the system simply ignored the action without notifying the user.

Smart Automatic Allocation of Resources in LS Activity

A new setup has been added to the **Product Resource Requirement**, where the user can now define the Reserve Logic, which controls how the system automatically assigns resources to an activity appointment.

By default, this logic is based on the Selection Priority setup on resources and capabilities, but now the user can also define the logic to

be based on the utilization percentage of the resource for the activity date. This enforces a more balanced assignment of resources to assignments, if needed. A new published event, which can be used to customize the automated assignment logic, has also been added.

LS Forecast

LS Forecast Restructured

LS Forecast has been restructured. The master data synchronization and all connections with the LS Forecast cloud app have been removed.

LS Central now depends on 3rd-party solutions to calculate and provide sales forecasts. LS Central holds the historical sales data and the master data. This data can be uploaded to an external demand forecasting engine. The produced forecast results can be stored in the table **LS Forecast Entry** in LS Central. LS Forecast Entries are used to calculate the amount of stock to replenish within a specified period.

Other functionalities, including Additional Dimensions and Item Suggestions, remain unchanged.

LS Hardware Station

Device Lock Configuration in Management Portal Has Been Changed

The **Disable Device Lock** in the Management Portal is now called **Device Locking Enabled**. The default value of the new property is the same as before, that is the device locking is not enabled. But the meaning of the property has been inverted, so if the device locking is enabled at a customer site, this new property needs to be updated accordingly.

Option Added to Print Test Strings

An option to print any test string has been added on the **POS Printer** card in Business Central and in the Hardware Station Management Portal.

LS Hotels

Hotel Housekeeping Rules and Tasks

Housekeeping feature has been implemented that supports issuing tasks according to relative housekeeping rules applied according to setup, either from **Hotel Setup** or **Room Type Setup**.

A new page, **Room Housekeeping Tasks**, is now accessible from the **Housekeeping Status** page (click the housekeeping tasks counters). The page shows how long tasks are estimated to take to complete along

with the task list itself. For vacant rooms or rooms that have stayover, tasks are issued based on a day interval that is set up either from **Housekeeping Tasks** or **Housekeeping Rules**. Priority rooms (rooms that have check-out and check-in on the same day), get a combined list from the check-in housekeeping rule and the check-out housekeeping rule (if both rules are used). This task list shows tasks that should be performed today.

Housekeeping job is updated to maintain this task list for each day, based on the status of the reservations and the status of the room.

Hotel Invoice Management Pages Removed from Business CentralSearch

The following card pages have been removed from the Business Central search, because they are accessible through lists:

- Cancellation policy card
- Rate code
- Reservation payment type
- Rate Code Price Config Card
- Room Type
- Room Card
- Room Rate
- Add Reservation to Group
- Bar Grid Card
- Deposit Amount and Payment
- Hotel Group Reservation
- Hotel Package
- Hotel Reservation Type Card
- Hotel Restriction Entry
- Housekeeping Rule
- Rate Change Card
- Rate Change Group
- Routing Rule

Hotel Invoice Update

The Hotel Invoice has been updated to be consistent with the change in Invoice Management, now that each hotel reservation can have multiple customers and invoices.

Information Added to LS Hotels Issue Logging

Information has been added to the **Export to Excel** logging action which is available on the **Reservation** card. This includes **Detailed Revenue Entry, Transaction Header, Sales Header** and lines, **Sales Invoice** and lines, and finally extensions published by LS Retail.

Information Icon Added to Tape Chart

An information icon has been added to the Tape Chart. Hovering displays a list and a short description of all icons that are used on the

chart.

Invoice and Transaction Summary - New Page

Invoice and Transaction Summary is a new page showing an overview of invoiced, paid, and unpaid revenue entries.

LS Hotels Setup Documentation Added to LS Central Help

Setup documentation has been added to the LS Central Help, see [Setting Up Hotels](#).

Multiple Customers to Pay on a Reservation

It is now possible to have multiple customers on a hotel reservation. Each charge line (DRE) has a **Payer No.** that is used to select lines into invoices in BackOffice and on the POS.

Restriction Name Added in Warning Description

The restriction name is now displayed in the warning or error message for restriction types **Stop**, **Sell Limit**, **Closed Departure**, and **Closed Arrival**.

Replenishment

Parallel Processes Now Available for Manual Replenishment Journal Calculation

Parallel calculation can be enabled for the Purchase and Transfer Replenishment Journal and this applies always to the scheduler-based calculation. You now have the option to also enable the parallel calculation process for the Replenishment Journals when they are being calculated manually.

For more information see [Parallel Replenishment Journal Calculation](#) in the LS Central Help.

Vendor Lead Time per Destination Location

You can now specify a different lead time for the vendor when delivering to different destination locations. This lead time value is used in Replenishment Journal calculation, and when the setup exists on the location level, it will take precedence over the lead time settings in the Item Vendor Catalog and the **Vendor Card**.

You also have the option to consider this new lead time setting in the Purchase Order, which will be used to calculate the Expected Receipt Date of the items.

For more information see [Vendor Lead Time per Destination Location](#) in the LS Central Help.

Fixed Issues

LS Central

Comp. Price Incl. VAT not Updated in Sales Price List Page

Comp. Price Incl. VAT is now populated after populating Unit Price Including VAT.

Customer Gets Both Cash and Credit Memo

This has been fixed by using Statement Post creation of Customer Ledger Entries when selling an item and using a higher deposit than the sold item and refunding on the POS.

Hard-coded Decimal Places

Inconsistently hard-coded decimal places have been changed to auto-format.

Incorrect Sales Quantity Calculation

Sales Quantity is now calculated based on Invoiced Quantity.

Issues When Creating SPG Orders

- An overflow issue with Customer Order: External ID when creating SPG orders has been fixed.
- Changes done to creation of Transaction for Sales Order posting.

OAuth in On-premises Multitenant LS Central Implementation

Login URL field has been added to the **Advanced** FastTab on the **Web Service Setup** page to set up on-premises S2S.

Permissions to Tenant Media in SaaS

Indirect permissions have been added to Media Tenant.

Post as Shipment

When "Post as Shipment" is used, a CLE is created with zero line to connect the transaction to the SO. The zero CLE line was created with value in the field **Sales(LCY)**. That should have been zero. This has now been fixed.

Price in Shipment Charge

It is not possible to finalize a Customer Order with 0 amount in the **Shipment Charge** item. To allow this, the field **LSC Zero Price Valid** must be set to true in the item table for the Shipment Charge Item.

Retail Image List - only 20 in characters in file name

Retail Image Import/Export now uses the full file name in the **Description** field. An option has been added to have the Retail Images use Number series. Number series is used for Retail Image.Code if the Retail

Setup.Retail Image Nos. is filled. If not, it uses the first 20 characters of the file name like before.

Rounding Amount on Customer Order Payment

A bug has been fixed where suspended transactions were not filtered out in calculation of Customer Order totals.

Sales Price List Issues

Events were added to populate LS extra fields on Sales price. Autotest were added to make sure the fields keep being populated (new feature only).

ScanPayGo: Canceling an SPG Order

It is now possible to cancel an SPG order, even with no SPG license.

Shopify: Prices and Region

XML value check has been added on decimal values from Shopify.

Table WS Request Log: Record Already Exists

Record locking will now be avoided in the **WS Request Log** table. Two or more web services can now add to the log simultaneously.

Fashion

Issue With Item Variants in Store Inventory Worksheets

When entering the quantity for an item with variants in the Store Inventory Journal opened from the Store Inventory Worksheets, the quantity was assigned to non-existent variants in the Dimension Matrix. This has now been fixed.

Food and Beverages

Seating Guests Not Possible After Allocating Tables to a Walk-in Reservation

Status handling after tables have been allocated has been fixed for both timeline and graphical view. Seating reserved guests is fixed also.

Table Cannot Be Seated in Store S0005

Fix has been created for seating tables - when checking an overlap and after opening the **Allocation** panel.

LS Central POS

Drawer Block Pop-up Closes Before the Drawer Is Closed

When the drawer alert type is enabled to block in the hardware profile, the transaction is done in the POS. When the drawer is open, it shows the "Drawer open alert" message on the screen and stays there until the drawer is closed.

Hospitality POS With Two Graphical Layout Hospitality Types

When switching between two hospitality types with graphical layouts with different numbers of dining tables, for example 12 and 30, the system always showed 30 dining table buttons. This has been fixed so that the system now shows one button per dining table (12 and 30 respectively).

POS Terminal Card: Computer Name in Capitals

An issue has been fixed that caused the terminal computer validation to be case sensitive.

Web Template Issue in Purchase History

An issue has been fixed that caused the purchase history details to not be displayed when expanding from the arrow.

Replenishment

Issue With Effective Inventory Settings on the Location Card

An issue where the Effective Inventory calculation in Replenishment was ignoring the **Effective Inv. Sales Order**, **Effective Inv. Purchase Ord.**, **Effective Inv. Transfer Inb.**, and **Effective Inv. Transfer Outb.** settings on the **Location Card**, has now been fixed.

Missing Tiles in LS Replenishment Role Center

In the SaaS environment, an issue where some tiles were missing in the LS Replenishment Role Center has now been fixed.

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LS Central 21.1 Release Notes

About This Release

Released - December 22, 2022

This version is built on Microsoft Dynamics 365 Business Central 2022, release wave 2, cumulative update 2, build 21.2.49946.49990.

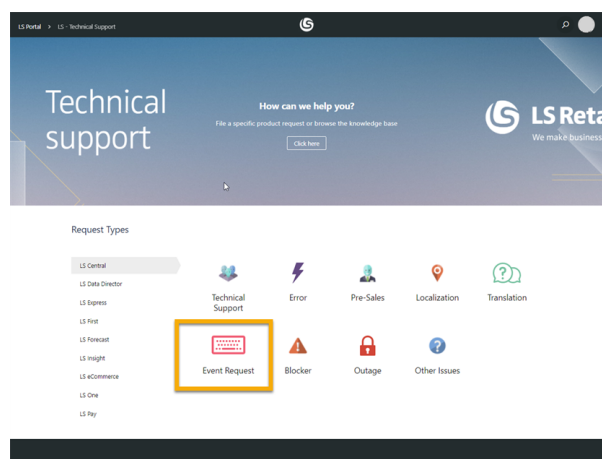
LS Central 21.1

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The release package includes LS Central and LS Central System App as runtime apps that can be installed as extensions. To install the extensions, you first need to publish them, see [Publishing and Installing an Extension v2.0](#). Once the LS Central and LS Central System App extensions have been published, the LS Central and LS Central System App extensions can be installed using the **Extension Management** page in Business Central.

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Obsolete code marked with tag 19.0 and below removed

Our solution gets bigger with every release, but we intend to clean up by removing obsolete code in major releases as soon as the code has been marked obsolete for at least a year.

In release 21.0 we removed constructs like procedures and events, but there are no breaking schema changes yet, like Tables and Table fields.

Recommended action: Check if you are using a feature that has been marked obsolete for more than a year. The warning should state the reason and the alternative that is intended to be used.

OnPrem-only procedures are now obsolete

All procedures and objects that are marked `#if _IS_SAAS_`, previously marked `[Scope('OnPrem')]`, will become internal.

From 21.0 these procedures and objects will be marked *Obsolete* for OnPrem extensions, until they will finally become internal in 22.0.

If your extension is using any of these, they will now get a warning.

Recommended action: If you have an OnPrem extension, check if there are any warnings. Usually, there are alternative procedures available, but partners can also request that a list of these is made public through the same flow as event requests.

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In version 17.4 we added an *LSC* prefix to LS Central, but this was not done for our Autotests extension, which we include in our releases.

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These cases are usually an oversight, since the *internal/local* keyword was missing for the *IntegrationEvent* so they become public, by default.

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OAuth web service authentication

As documented by Microsoft, **OAuth2** will be the authentication option for Business Central SaaS and Basic authentication will be deprecated, see [here](#):

Changes in 2022 release wave 1 (version 20.0)

Web Service Access Keys (Basic Auth) for Business Central Online

The following feature will be Removed with Business Central 2022 release wave 1.

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Removed (online only)	The capability to access web services in Business Central using Web Service Access Key (Basic Auth) is deprecated for SaaS. OAuth2 will be the authentication option for SaaS. OAuth samples are published in the BCTech repo . For more information, see Using OAuth to Authorize Business Central Web Services (OData and SOAP) . For on-premises, Web Service Access Key (Basic Auth) will remain an option for the time being. This change has no impact on how Business Central connects to external services.

LS Central version 21.5 supports the use of Service2Service OAuth2 authentication when using LS Central as a web service client, for example when POS (web service client) is calling web services on Head Office (web service server).

New or Enhanced Features

LS Central

Changes in Field "Exception Detected" on ASN Lines

The **Exception Detected** field in table 10001372 LSC ASN Delivery Document Line is now of type *enum*.

Drop-down Field Group Added in Member Contact Table

When a lookup or drop-down is done on a Member Contact, **Contact No.**, **Account No.**, and Member Contact **Name** are displayed for the selected Member Contact.

POS Command for Exchange

The new POS command, EXCHANGE, also implies:

- new POS menu EXCHANGE
- new POS lookup EXCHANGE
- updated POS Menu #Trans with the new command.

With this new command you can select a transaction and exchange it. You can exchange "like for like": a return and a sales line are added with inverse values to the POS. Additional sales lines can be added too.

You can exchange per other items: a return line is added to the POS and then the user can add sales lines.

Posting Retail Receiving Documents

Retail Receiving Documents can now be posted directly when they are created from ASN Documents.

Refactoring of LS Central Libraries

The organization of LS Central libraries and naming of functions has been refactored.

Setup Hierarchy for Item Categories

It is now possible to add Item Categories as Child items in Hierarchy Nodes.

Total Offer Step Amount Calculation

New optional setup is available for Total Offers to control how the base for step amount is calculated.

Use the **Use Offer Total Amount** flag (see the **Triggers** FastTab) to calculate the step amount only based on the transaction lines that are valid for the offer. The step amount base was and is still calculated as the whole transaction, except when this flag is turned on, then only lines from the offer are used for the calculation.

Fashion

Variant Mandatory if Exists Setup Field Available in Retail Item Card

The new **Variant Mandatory if Exists** field introduced by Microsoft in Business Central 2022 release wave 2, available in the **Inventory Setup** page and the **Item Card** page to specify whether a variant must be selected if variants exist for an item, has also been added to the **Retail Item Card** page.

Food & Beverages

Self-Service Language Different from System Language

It is now possible to let the default language of the Self-Service Kiosk be different from the system language, regardless of whether there is a possibility to choose between two or more languages in the kiosk.

LS Activity

Activity Components Visible on Activity Group Reservations

A setup called **Show Member Activities** has been added to the **Activity Reservation Type Card**, in the **Group Settings** FastTab with default value *No*. Other options are *Show All Activities* and *Show Line Related Activities* on the **Group Reservation** card. This allows the user to easily see what activities are related to each group member, and to access all features that are normally in the **Reservation Line** section of the individual **Reservation Card**.

By default this section is not visible on the **Group Reservation** card. In older reservations, this feature will not show the related activities, but only activities in reservations created after this feature was implemented.

For older data a function has been added to the **Member Section** to open the **Members Reservation** card for quick access to the reservation for editing and viewing purposes. In addition, the drill-down to the activity from the members list will open the **Reservation Card**, if the related product is a package.

Matrix Resource Swap by Dropping to Another Activity

It is now possible to swap resources on the Activity Matrix by dropping one activity on another.

Swapping Resources for Activities by Drag-and-Drop

The setting to turn on or off the Drag-and-Drop feature in the Activity Matrix has been removed. Now Drag-and-Drop is now always an option in all matrices. Also, if the user drags and drops an activity onto an existing activity, the user is asked if he or she wants to swap the resources for these two activities.

Only the resources on display will be swapped, and not any other resources that might be assigned to the activities. If the user does not confirm the swap, the system will try to add the dropped activity to the selected date and time, and depending on availability and overbooking settings, the activity will be rescheduled.

When swapping resources, the system checks if the resources are available (working) on the relevant times.

Using Bold Type, Highlighting, and Colored Lines for Current Period

In resource and product capacity setups, entries add up with time, especially if capacity is commonly different on specific dates. This can lead to many outdated entries, which you still should not delete, since they are needed for capacity history.

Now the system shows the entries that affect TODAY in green color to indicate to the user which entries are affecting today's availability. A new **Expire** process on the **Resource Scheduling** page marks all

outdated entries as *Expired*. The page now also has a standard **View** to filter out the expired entries. The "expire" process does not affect any availability logic, it simply marks the entry so the user and views can be filtered on that field for a simpler view.

Week View Data for a Given Resource

The Activity Matrix now supports a Week View of a selected resource. In the Matrix, the user can click a resource to select a new menu item, **Week View**, which shows the selected resource assignment for the next 7 days. To switch between resources, the user can use the Selection Lookup in the matrix header to get a list of resources to choose from.

LS Central POS

Scale Certification Requirements: New Configurations

Two properties have been added to the **Functionality** profile to make it easier to fulfill scale certification requirements:

- **General -> Print Total Price Line in Bold**: When selected, the total amount line of the receipt will be printed in a bold font
- **Amount -> Print Currency Symbol in Amount header**: If selected, the POS Currency Symbol will be added to the **Amount** header in the customer's receipt.

LS Hardware Station

OPOS Devices to Stop Reloading

When they get new settings, OPOS devices will no longer reload. This prevents a lot of unnecessary reloading which slows down devices, especially printers.

LS Hotels

Date Sold Field Added to Hotel Reservation

- The **Date Sold** field has been added to the hotel reservation. "Date Sold" is the date when a hotel reservation was sold.
- If "Date Sold" is specified in a Reservation, this date is used as a booking date in discounts (Advance days and Booking Date Range). The new **Date Sold** field was added to the **New Reservation** Page to control changes but is not visible by default.

Tip: The field is not displayed on any page yet, but you can use Designer to add it to the **New Reservation** page.

Day View by Date, Page

A new page called **Day View by Date** has been added to the Front Desk Role Center. The page shows arriving and departing reservations

based on a date and a property that you select in the date filter part. It also shows you how many early check-ins and -outs and late check-in and -out reservations there are on the selected date.

A tooltip has also been added for the **Reservation** field on the arriving and departing list to explain the meaning of the colors.

FactBox and Counter Fields Added to Day View Page

A FactBox has been added to the **Day View** page showing statistics for arriving, stayover, and departing reservations, for example number of reservations, guests, early and late check-ins and check-outs. The **Day View** page now also shows stayover reservations for selected dates in a FastTab.

The **Day View** page action has also been added to the Housekeeping Role Center, so it is now accessible from both Role Centers.

Priority Rooms Highlighted in Front Desk Role Center and in Day View Page

A new queue, **Priority Rooms**, has been added to the Front Desk Role Center to show how many rooms there are that have check-out and check-in on the same day (today).

When you click the queue, it shows you a sorted list of all rooms that are marked as priority. Rooms that are already empty (reservation has checked out) are shown in green color and are at the top of the list.

Once a reservation has been checked-in to a room, it is dropped off the list and is no longer a priority room.

Rate Discounts

A new discount functionality for Hotel Rates, found under **Hotel Res. Discounts**, has been added to the Hotels module. The discount applies to Hotel Reservations when offers are created for specific periods (either when the offer is booked or used), for different locations, or down to different rates.

This discount framework is similar to what already exists in the Activity module, but the discounts for Hotels have these sources: Property, Rate Code, Room Type.

- **Quantity Based Discounts** - Qty = No. days/nights of booking or discount based on the length of stay.
- **Discount type** - Percentage, Amount, or Free Nights
- **Seasonal Discounts** - From Date to Another Date...Based on Arrival Date or/and Booking Date or/and Day Setting.
- Discount based on days in advance
- Discount banner appears in New Reservation, if applicable.

The discount selection rule is: always get the highest discount.

LS KDS

KDS - Change WCF Communication to Duplex/Callback

The WCF communication model for the Kitchen Service and Display Station has been changed to use the WCF Duplex/Callback protocol, now using only one TCP/IP port instead of a separate port for each connection with the Display Stations. This reduces complexities in the network communications. This version can be used with older Business Central versions (at least 20.x).

Replenishment

Extending the LSC Replen. Item Quantity Table with Additional Filter Fields

We have refactored how the filters from the LSC Replen. Item Quantity table are carried over to the RIQ calculation codeunit **LSC Replen. - Calc. Qty's**, and added the integration event **OnCalculateReplenishmentQuantitiesOnAfterApplyRIQFilter** in the procedure *CalculateReplenishmentQuantities* within the codeunit to make it possible to extend the LSC Replen. Item Quantity table filtering capabilities with additional filter fields.

POS Commands

The following POS command is new in LS Central 21.1:

- **EXCHANGE** - With this command you can select a transaction and exchange it, for example "like for like" or for other items.

See [POS Commands](#) in the LS Central Help and the corresponding [Excel list](#) with filters for a complete list of POS commands.

Other

LS Central Help

- The **LS Pharmacy Help** is now part of the **Retail** section of the LS Central Help, see [here](#).
- [Replication in LS Central](#) is a new addition to the LS Central Help.

Fixed Issues

LS Central

Barcode Variables Deleted

Variables *BarcDescription* and *BarcltemGroup* have been deleted because they are not used in the code.

Changes Related to the New Price Module

- The **Retail Price Including VAT** field on the **Retail Item Card** removed.
- A new FactBox, **Item Price Overview**, has been added to the **Retail Item Card**.

Incorrect Transaction Payments When Invoicing Sales Order Made from Customer Order

Transaction creation when posting Sales Orders created through Web Customer Orders to transactions created when a Customer Order creates a Sales Order through the POS has been synced.

New Web Service: GetStaffV2

A new version of the *GetStaff* web service, *GetStaffV2*, has been added. It now returns the Staff Store Link record, if the Staff has links to other stores.

Page 10000929 "LSC hierar. Sibling/Child Node"

- Variable *ParentNodeID* length was updated to 30, the same length as the field in the table.
- Variable *HierarchyCode* was not updated, because the field length in the table is 20.

Posting Customer Orders not Working in Shopify Mode

A check for URI has been added in the **Function Profile**: if there is no URI, COs are not posted via web hooks, only via events, for example the ones that Shopify uses.

Safe Management: Split Bag

The **Split Bag No.** field has been added to Bag Tender Declaration. The field has to be filled before splitting a safe Bag, if Tender Type **Safe Bags No. Type** is set to *Manual Numbers*.

Web Replication Linked Table Fix

Processing linked tables is now skipped, if the primary record is not found.

Food and Beverages

Allocation Panel Performance Improved

Table Allocation panel handling has been refactored for performance enhancements. Automatic allocation is now much faster (a test for 546 reservations for 300 tables with 15 minute intervals is now just over a minute instead of over 12 minutes before).

Change in 'Dining Area Utilities' Codeunit

The **Menu Type Code** field in the **Dining Table Info Buffer** table has been obsolete. The **KOT Menu Type Code** field is used instead of length 10.

FAB Order not Created When Order Process Time (Min) Is Zero

The minimum value for **Order Process Time** in **Hospitality Setup** is 1.

LS Commerce FastTab Added to Restaurant Card

LS Commerce field group is now on the **Restaurant Card**.

No Dining Area Plan Found Error Message

The way **Date From**, **Date To**, **Time From**, and **Time To** fields in the **Activity Reservation** table are validated has been fixed.

Dining Activity Type must now have **Day Duration Single Day** (upgrade included).

Next Day and **Previous Day** functions were added to the **Product Availability Lookup** page.

No. of Covers on Z-Reading Report Includes the Covers of Refunded Transactions

This has been fixed. Return sales is no longer counted in **No. of Covers** in Z-reports.

LS Activity

Activity Event Handling Caused Length of String Error in Activity Event View Table

An error was fixed where assigning the event location in the **Activity Event View** table when creating BEO views caused a string length error.

In previous versions, this field was wrongly assigned with the resource description rather than the resource number or reference. This would cause an error, if the resource description exceeded 20 characters.

Appointment's Duration Changes to Default Setting When Rescheduled

A bug in the Activity Matrix's drag-and-drop feature caused the rescheduling process to reset the duration to the initial default setting.

This only happened if the activity had a manual duration change (which was not related to the Quantity of the activity), and not if the duration of the activity was related to the Quantity. This has now been fixed.

Error in Length of Reservation String

When a package was sold and the **Reservation No.** exceeded 10 characters, an error occurred. This has been fixed.

Hours Displayed Incorrectly on Roster

A bug in the Staff Management roster has been fixed. Due to formatting, showing "Hours" could lead to "Minutes" being missing, if the value was not rounded to whole hours.

Matrix Type **Hours (00:00)**, which can show number of hours based on minutes, rather than decimals, was also added. For example 4.5 hours would be displayed as 4:30. The Matrix Type **Hours** shows the same value as 4.5.

Moving Activity Fails When Overbooking Is Allowed

A bug has been fixed in the drag-and-drop Matrix process. An activity booking would be drafted instead of showing a message of non-availability during the process, and then the booking would disappear from the matrix (because it was a draft).

Tax Issue With Activity Charges

A bug related to Tax calculation in the NA version has been fixed. When paying additional charges for an activity reservation, the amount was missing the tax amount.

Total Hours per Week vs. Month

The calculation of the **Total Scheduled** and **Scheduled %** fields in the roster scheduling page has been changed when week periods are being displayed. Now when the **Period** is set to week instead of month, the **Total Scheduled** shows the total hours scheduled for the selected week period, regardless of which roster it belongs to.

Also, the **Scheduled %** field now shows the ratio of the scheduled hours for the selected week of the Optimal hours of the current planning month. Only scheduled hours, which are part of the selected Plan No., are included in the ratio calculation, since the optimal hours are set for the planning month. Previously, these values always displayed the month values and did not change when period view was changed to Week X.

LS Central POS

#KEY Displayed When Making a Customer Order

- An issue causing #KEY to be displayed in the search input has been fixed.
- The field caption, if provided, is now displayed.

Label not Visible in Lookup on POS

An issue that caused the sort column text not to be displayed when opening a grid has now been fixed.

Limitation in Clienteling Fixed

It is now possible to add an item with the attribute of type *Option* that has 250 or more characters (previously 250 max) at POS Clienteling.

Hotels

Creating a Deposit Produces an Error Message on Transaction Header

This has been fixed by forcing to get the last transaction number from the Transaction table before making a deposit.

LS Central 21.0 Release Notes

About This Release

Released - November 29, 2022

This version is built on Microsoft Dynamics 365 Business Central 2022, release wave 2, cumulative update 1, build 21.1.48363.48638.

New or Enhanced Features on page 67

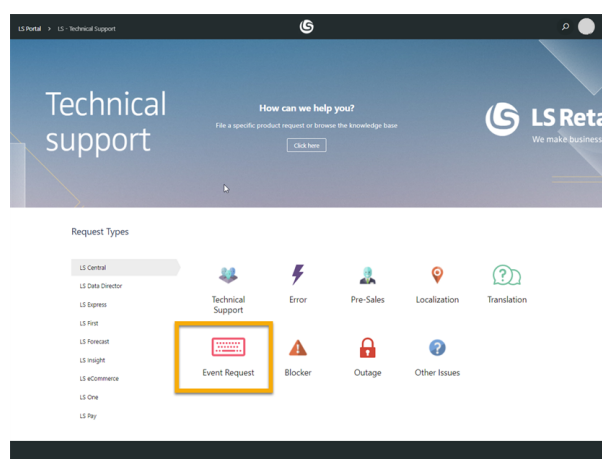
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Removed or Replaced?	Why?
Removed (online only)	The capability to access web services in Business Central using Web Service Access Key (Basic Auth) is deprecated for SaaS. OAuth2 will be the authentication option for SaaS. OAuth samples are published in the BCTech repo . For more information, see Using OAuth to Authorize Business Central Web Services (OData and SOAP) . For on-premises, Web Service Access Key (Basic Auth) will remain an option for the time being. This change has no impact on how Business Central connects to external services.

LS Central version 21.5 supports the use of Service2Service OAuth2 authentication when using LS Central as a web service client, for example when POS (web service client) is calling web services on Head Office (web service server).

New or Enhanced Features

LS Central

Adjusting LS Central Pages to New Business Central Price Module

LS Central is now ready for upgrading to the New Price Module introduced by Microsoft in version 16. This upgrade will be done automatically in version 22 (Q2, 2023). The main change in LS Central is that Item Prices can no longer be changed from the **Retail Item Card**. Prices are now manipulated through the standard **Sales Price Lists**.

When the system is upgraded, the current price list that is stored in table Price List (7002) is copied to the new **Default Price List**.

Customer Order Number on the Receipt Barcode

Customer Order collect with a barcode scan: If a Barcode Mask is defined in **Customer Order Setup**, the user can now simply scan the barcode from the Customer Order receipt to collect the order.

***GetInventoryStatus* Updated With Item Distribution**

Item Distribution lookup has been added in the *GetInventoryStatus* function to return only items for the requested store number.

Hierarchy Setup for Item Categories

It is now possible to add Item Categories as Child items in Hierarchy Nodes.

Mobile Inventory Receiving, Expiry Date and LOT/Batch Number

An option has been added to scan and receive Lot Number and Expiration Date through Retail Receiving on Mobile Inventory devices.

Food & Beverages

Adding the Same Item in Multiple Deal Lines

A deal can now contain the same item multiple times. This is useful when creating a family deal with four burgers, each burger with a choice of sides and sauces. The item description in the deal lines (offer lines) can be edited (burger 1, burger 2 and so on).

Pickup Time Set as Due Time/Date for KOT

When an order is created through the Commerce Service, the request includes a pickup time for the order. Either the time is when the order is placed and it should go into production as soon as possible, or the pickup is in the future and should not be displayed on the KDS production screens. Therefore, the pickup time coming from the web request must be set as pickup time for the food and beverage order.

Self-Service Kiosk: Scanning a Member

In the Self-Service Kiosk you can now scan a member card with a keyboard input scanner to add the member to the transaction. The member and the point status is displayed on the screen. This functionality can be enabled/disabled with a setting on the **Restaurant Card**.

LS Activity

Activity Host Enhancements

Booking an Activity from Activity Reservation Detail Panel

It is now possible to use the POS command BOOKPRODLIST to add an Activity to a reservation in the Activity Host.

Confirmation window displayed before changing status in Activity Host

If the user does a status change on an activity from the POS, a confirmation dialog window now pops up and the user is asked to confirm the request.

Reservation templates

Activity Host now shows Activity Total Amount, Extra Charges, and Balance.

Web Templates

A few UI changes have been made to improve the Activity Host web templates.

Activity Matrix Enhancements

Confirmation dialog window

An option of having to confirm when an activity is dragged and dropped inside the Activity Matrix, was added to Activity Setup.

Glyph scripts on appointments

An option has been added to show glyph scripts on appointments in the Activity Matrix.

Matrix Day View

The user can now configure how many columns are shown in the Activity Matrix.

New Today button

A **Today** button has been added to the header of the Activity Matrix for quicker navigation.

Searches through Role Center

Searching for Matrix now leads to the new javascript-based matrix, while the old POS-based matrix has been obsoleted from the search function.

New Matrix Glyphs Added to Demo Data

Image parameters have been added to the script possibilities to cover multiple image (glyph) settings:

- Activity or Reservation was booked online
- Activity or Reservation has comments
- New Client (no previous visits)
- Number of previous visits (to this location)
- Activity is part of package
- Reservation has Deposit
- Activity is part of membership
- Multi-staff activity.

The parameters/images can be assigned to glyphs in the matrix template to present images (or icons) to represent status or assignment for the activity. These parameters are supported using subscriber extensions and also act as examples, so partners can easily add new image logic to the system as required by the end user.

Resources Selection Priority Field

The value range for the **Resource Selection Priority** field no longer has the limit of the higher value of 10.

Retail Images Added to Activity Label Types to Show Icons in Matrix

The Activity Parameter extension possibilities in scripts now support the returning of Retail Image IDs. This feature is used in the new Activity Matrix to show glyphs (images) in the Matrix cell, payment status, for example, can now show a \$ image and so on.

Total Balance in Web Templates

The total balance amount is now displayed in the Activity Host web templates.

Reservation Number Updated in POS Code

The reservation number is now updated in the POS code, to know which reservation is open.

Warning Displayed When Paying Individual Group Member Reservation

If a user tries to pay an individual group member reservation that has **Charge Type** set as *Group*, the following message is displayed: "There is nothing to pay. If you are paying Reservation that is a part of a Group check that Charge Type = individual."

Warning Displayed When Reservation Cannot Be Pulled Into the POS Journal

Now if an activity is being pulled into the POS journal for payment, and the activity is already in payment process on another POS, the system now provides a warning message to the user to inform why the activity is excluded from the payment process.

Warning Displayed When User Cancels Reservation

The command CHRESSTATUS in Activity Host is used to change status on Activity Reservation, it can be *Cancel*, *Draft*, or any other status. Before the change a confirmation message is displayed: "Are you sure you want to change status on Reservation <reservation no> to <new status>?".

LS Central POS

Printing Order for Sales and Card Slips

When printing both sales slips and card slips (EFT) on the POS, the printing order is now first the sales slip (customer), next card slip (customer), and finally the card slip (merchant). This is more convenient for handing the slips over to the customer.

LS Hotels

Amount Incl. VAT in Web Templates

Amount with VAT included is now shown in the web templates in correlation with setup on the **Hotel Setup** page (if "Rates includes VAT" is set to false, "Amount included VAT" is shown in web templates).

A new field, **Web Date Format**, was added to the hotel setup so users and partners can now control how the date is shown in the web templates.

Tooltips were added to the web templates.

The Web Templates config. package has been updated with the new templates.

Configuration Packages Updated

All configuration packages have been updated and unwanted data removed. Some errors on previous packages have been fixed.

Excel files for all packages have also been added for improved transparency on data in the packages.

Date Sold Added to Hotel Reservation

A new field, **Date Sold**, has been added to the hotel reservation. If set, this is the actual date the reservation was sold. Not displayed on any page.

Host Added to a Reservation

A new field, **Host**, has been added to the **Hotel Reservation** table and related pages. In the **Hotel User List**, it is possible to add user as a Host, after that Host can be added to a Hotel Reservation. The Front Desk role center highlights number of Hotel Reservations with Hotel User as Host. Also showing list of Reservations with Host.

Hotel Code in SaaS - Internal Procedures

Added "Access=Internal" to all CUs so the CUs can be accessed only by code in the same module.

One CU is public, *LSCHT Hotel Integration*, and it has methods that can be used by external apps.

Hotel Reservation Page Factbox

Group comments are now shown with reservation comments.

Hotel Statistic Reporting and Power BI

The **Hotel Res. Statistic** page has been added to view revenues, room availabilities, ADR, RevPAR, TRevPAR.

To populate the **Hotel Res. Statistic** table, the **Calculate Statistic** field in **Hotel Setup** must be enabled.

Hotels Demo Data: Staff Management Setup Added

A new Configuration Package has been added to the Hotels Demo Data with setup for Staff Management.

Posting Accommodation Item Against Deposit in BackOffice

It is now possible to create a payment against a deposit from the back office when balance is zero.

A new action, **Payment against deposit**, on the **Payment Entry List** page creates a transaction with sales entries against the "POS Deposit Posting" income expense account. The reservation must have deposit (s) posted to finance, balance must be zero and have entry lines not paid.

Printing Room Number on POS Receipt

When charging items to a room from the POS, the POS receipt will have the room number listed behind the *Charged to room* tender type by default.

Soft Checkin Status Added

Two new fields have been added to the **Hotel Reservation Status** table and the **Hotel Status Setup Page**:

- **Soft Checkin Allowed** is a boolean field and is only viable when internal status is set to *Confirmed*. When set to true, the field allows charging to room from the POS for that status.
- **Arrival filter (Today + X)** is an integer field that specifies how many days in the future the charge to reservation list on a POS should be shown. This is only enabled if the **Soft Checkin Allowed** field is set to true.

In the new Demo Data package, a new status, **Soft Checkin**, was added with internal status *Confirmed*, for group master and room reservation types. The *Confirmed* status is default to prevent a pop-up to select which (internal) confirmed status you would want to use when creating a new reservation.

VAT Fields Removed from DRE Table

All VAT and LCY fields in the **Detailed Revenue Entry** table have been marked as obsolete and are no longer used.

In **Detailed Revenue Entry**, the **Amount Incl. VAT**, and **VAT Amount** fields are still populated but not displayed.

In **Hotel Setup**, **Rate Includes Tax** is used when creating a sales invoice (**Prices Including VAT**). If **Rate Includes Tax** is false, the localization app must handle POS tax calculations and **Total Incl. VAT** is displayed on the **Hotel Reservation** page (calculated using sales invoice logic).

LS KDS

Change WCF Communication to Duplex/Callback

The WCF communication model for the Kitchen Service and Display Station has been changed to use the WCF Duplex/Callback protocol, using only one TCP/IP port, instead of using a separate port for each connection with the Display Stations.

This should reduce complexities in the network communications. This version can be used with older Business Central versions (20.x at least).

Service Type Setup

The options *F&B Orders* in the **Layout View** field and *F&B Takeaway in Restaurant* in the **Service Type** field in the Hospitality Type table have been made obsolete. F&B now uses *Takeaway Service Type* and *KOT list* as Layout View.

Replenishment

Speed Up the Replenishment Journal Calculation With the Parallel Calculation Approach

You can now calculate the Purchase and Transfer Replenishment Journal using parallel processes. When this option is enabled, the items within a journal will be split evenly and shared across multiple sessions so that they can be calculated in parallel. The result is that the calculation time of the journal is shortened.

The parallel calculation process is applicable for the Scheduler-based calculation, and can be activated in the **Replen. Setup** page, with the **Parallel Calculation** settings in the **Replen. Journals** FastTab.

For more information see [Parallel Replenishment Journal Calculation](#) in the LS Central Help.

POS Commands

The following POS Commands are new in LS Central 21.0:

- ACT-FRONTDESK - Command for the Front Desk panel. Function depends on the parameter.
- CHRESSTATUS - Command for the Front Desk panel to change the status of a reservation. Function depends on the parameter.

See [POS Commands](#) in the LS Central Help and the corresponding [Excel list](#) with filters for a complete list of POS commands.

Fixed Issues

LS Central

Archiving Discount Offer in version 20.0

A new field with ID 610 CustomerDiscountGroup was added to the table **LSC Arch Periodic Discount** to be able to use transfer fields when the field with ID 602 Customer Discount Group is deleted.

In table **LSC Periodic Discount** the field with ID 610 "Do not Use" was added to prevent this issue in the future.

Change Staff for a POS Transaction

Code has been added to the Staff Lookup to check if the staff is a Sales Person and display an error if it is, same as in login.

Customer Order: Member Line Added to POS Lines

A Member line has been added to the POS lines. The Transaction Register and the Customer Order deposit payment line now have the **Member Card No.** field populated.

Customer Posting: Credit Memos

Create Credit Memo when a Customer is marked *Post as Shipment*. Changes were implemented to navigate in posted statements to show Return Receipts, Customer Orders, and Posted Customer Orders related to the posted statement.

Db Server Name Field Expanded

URI fields have been expanded, %20 added on spaces for SaaS connections, and the order of the fields on **Distribution Location** and **Web Server Setup** pages has been changed.

DD Connection String Fixed

The %20 functionality has been removed for DD company names.

License Manager Setup Actions not Showing Up

An error, where License Manager setup actions were not displayed, has been fixed.

Link to Account Issue

When a new Member Contact is created on the POS by adding the member to an existing Member Account, the Link to Account lookup is filtered according to criteria set in the Member Contact zoom record (same as is used for searching for existing member contacts when the Search command is used). The name is compared to the **Description** field in the Member Account record and a specific Member Account No. can be used to find an existing account. This is done to limit the data flowing from the main data base to the client.

When an account has been selected, the search criteria is cleared and information about the Member Contact should be entered and the **Save** button pressed.

New Action for Hierarchy

When the description of an Item/deals/item category is changed, the description in the hierarchy node links are updated.

Price Change: Showing 0 Values on Balance Tab after Manager Login

When changing staff in the middle of Transaction, some of the Tag values were cleared and not recalculated. This has been fixed.

Register Logon/Logoff After Updating to 20.5

Register Logon/Logoff on the POS has been fixed.

S2S Authentication On-Premises

A new field has been added on the **Web Service Setup** page to specify the scope.

Sales Price List: New Field

A new field, **Price including VAT**, has been added to the **Duplicate Price Lines** page. The **Style** was also adjusted to follow same logic as Microsoft's.

Shopify Discount and Various Updates

The following issues have been fixed in Shopify:

- Cancel Customer Order error
- Discount Offers sent to Shopify
- Central Item No included in Attribute table
- Prices only updated since last run (not the whole list every time).

Web Request Logging Failing and Preventing Login

Code was updated to only store 250 characters in the Web Service logs.

Food and Beverages

Adding Member to Reservation Without Creating a Transaction

Populating the member web template is now done without creating a dummy POS transaction.

Due Date Missing in Requisition Worksheet in Meal Planning

The code has been fixed so that when you create a Requisition Worksheet from Meal Menu Plan, a **Due Date** is set in the **Requisition Worksheet Lines**.

Hospitality POS: 'Show Reservation' Does not Work in Table Allocation

The command TR-A-SHOW_RESERV has been changed to filter the dining reservation grid to show the reservation that is connected to the dining table pressed. The filtering is removed on idle-timer and when other commands are performed. This command can be added to allocation pop-up menus as needed.

POS Dining Reservation

Dining Reservation Desk now adds member information when populating the availability grid.

Recipe Card Request

When checking availability, the system now checks current availability for the current recipe and only checks if it is needed to produce more. The system only checks for missing ingredients for the recipe that needs to be created.

Self-Service Kiosk

Get Hierarchy takes too long

Images are now loaded at the start of the POS. This improves performance by 50% at least.

Text and time modifiers

Text and time modifiers can now be configured for items sold in the Self-Service Kiosk. The modifier pops up after selling the item or recipe, and you can select the modifiers available. The modifiers can also be edited in the edit mode for the items.

UOM description removed from Deal Modifier Description in Dynamic Content Menu

The Self-Service Kiosk needs to have a deal modifier item description without the unit of measure reference. A new field, **Item Description**, has been added to the **Deal Modifier Item** table that is just the item description. The caption of the **Description** field has been changed to **Pop-up Description**. Upgrade is in place, filling in the new **Item Description** field.

LS Activity

Transferring Resource Entries: Picking Up Location

A bug was fixed in the Transfer functionality when transferring resource entries from one resource to another, on the **Resource Scheduling**

page. Before, the system would always pick up the currently selected user location, but now the location is picked up from the selected scheduling entry.

Replenishment

Transfer Multiple Not Working for Quantity to Cross Dock

When calculating the Purchase Replenishment Journal with cross docking enabled, an issue where the Quantity to Cross Dock did not get rounded according to the Transfer Multiple has now been fixed.