LS Central (17.0-17.5)

Release Notes

May 27, 2021

LS Retail

Contents

LS Central 17.5 Release Notes

About This Release

Released - April 29, 2021

This version is built on Microsoft Dynamics 365 Business Central 2020 release wave 2, cumulative update 5, build 17.5.22499.22546.

Discontinuation of LS Nav

LS Retail policy for LS Central is that new features and fixes go into the next new release, not previous releases. When LS Central 15.0, the first AL version, was released, it was decided to make an exception to this by continuing to release fixes and new events in LS Nav 14.x for a limited time. The time has come to end this exception: the last version of LS Nav 14, version 14.04, was released in January 2021.

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Until now the build number section has always been 0. Due to a technical change in the Business Central platform, LS Central versions 17.4, 17.5, and 18.0 will be released with a build number (not equal to 0).

LS Central Object Prefixing

One of the requirements for apps on AppSource is to add an Affix to all objects in the app. To prepare LS Central for AppSource, all LS Central objects have been prefixed with the prefix **LSC**.

There is a 30-character limit on object names. Over 1000 LS Central objects exceed that limit when the LSC prefix is added to the object name. These object names have been adjusted, for example by using abbreviations, shortened words, or other naming adjustments.

For all object types except PageExtensions and TableExtensions the prefix is on object level. On PageExtensions and TableExtensions the prefix is on control/field/action level. Captions are not changed. AL source file names are not changed.

All apps that have dependency on LS Central should be tested and adjusted to the prefixed names. **This is a breaking change and upgrades must use ForceSync**.

New or Enhanced Features

Retail
BackOffice
White-listed Auto-tests Removed
White-listed unit test codeunits have now been removed from the code base. Now all auto-test codeunits in the master repository should run successfully.

POS Debug Log to Database Table
POS Debug Log feature can now be configured to log to a data table. This feature lets you log the activity of the POS to an SQL table instead of logging into a file. This makes it possible to get a Debug log even if you are running the POS in a Cloud environment.

You can configure to get the logs for certain terminals at a given time or period and so on. When the Debug Log has been created, you can view the log, download and delete it in the BackOffice. The Log entries will be automatically deleted after a number days since their creation; the number of days is configurable.

Update Item.Picture Value
There is a new action, **Update Item Pictures**, in Retail Images. This action updates the **Retail Image List** page with the image that is linked to the retail item based on the Retail Item Link records that are linked to the **Item** table. This can be useful, for example, in case the Retail Images and Retail Image Link records are imported from *.zip* or configuration files.

LS Hardware Station
MSR Virtual Device Added to Virtual Station
The Virtual MSR device has been reintroduced to the Virtual Station. The functionality is the same as before.

For more information see "Virtual MSR" in the LS Central Help.

LS Central POS
Cancel/Close Button Added to Device Dialog Window for Scanner
The **Scanner** dialog window (MOBILESCAN) now has a **Close** button that can be used to close the dialog window in case it hangs after a scan.

Hospitality
LS Central for Restaurants
New Web Services for Hospitality
There are four new web services for Hospitality:

- CreateHospOrder
- CancelHospOrder
- GetEstimatedTime
- GetKotStatus

Performance Improvement: Temporary Tables
To improve performance, six tables that are always used as temporary within Hospitality are now marked with TableType *Temporary*.

LS Activity
Improved Unavailability Setting on Resources
The user can now set up general unavailability for a resource on a specific time or date, for example lunch breaks at a different time on specific dates. The user can simply set the date and the new lunch time, and set the comment as *Lunch*. If the comment is the same as in the general unavailability, the system will regard it as a change for lunch on only that particular date.

The user can use "drag and drop" features in the availability matrix to move the breaks (unavailability) to a different time. This is possible even if the break (unavailability) is derived from a general setting, as the system will automatically create a specific date unavailability in the background.

New Actions on Activity Group Lines List
There are new actions on the **Activity Group Lines** list to **Confirm All** and **Cancel All** - these will always change the status on all activities in the group reservation.

New Option to Show Price Comment on POS
The Activity setup has a new option, **Show Price Comment on POS**. When set, the associated price comment in the POS journal is shown when an activity is paid on the POS.

New Setting on Activity Reservation Type
The Activity Reservation Type has a new setting, *Update Group Reservation Dates*. If set, the from/to dates on the group reservation will be automatically updated upon confirmation, based on the related activities. In case this does not work on hotel reservations, you should set the related reservation type to NOT do so, and then it is just populated by the related dates in the hotel reservation.

Open Deposit Balance Shown in Activity Manager Role Center

The Activity Manager Role Center has a new cue, **Deposits**, that shows open deposit balances. When you click the cue, a list opens with the related reservations. The **History** top menu has a new action, **Transactions**, that shows a list of all deposits, charge2res, hotelres, and cancellation fees.

LS Hotels

New Upsell and Upgrade Page

A new page has been added to perform upsell or upgrade between rooms, property, and rate codes. You can open this page with the **Upsell/Upgrade** action on the **Reservation** card. The page will also open automatically if

- the room is changed and the new room has a different room type.
- **Room Type** is changed - if the new room type does not have the same rate code as the old room type, the new rate code is empty and needs to be selected.
- **Property** is changed -if the room type does not exist in the new property, the new room type is empty and needs to be selected.

The total amounts (old and new) are shown, and the **From** and **To** sections show if there is a difference in rate attributes between the old and new settings.

The default setting is to do an upsell, but there is an option to do an upgrade. Ifan upgrade, the **New Total Amount** is set the same as the **Old Total Amount** and the **Rate Code Attributes** prices are then adjusted with the same split percentage as on the pre-upgrade setting.

Undo Check-in

If a reservation was accidentally checked in, it is now possible to undo the check-in. This is only possible on the same day as the check-in and before the Night Audit job has been run.

Support for Late Check-ins (After Midnight)

If guests are arriving after midnight, it is now possible to check the guests in provided the reservation has not been set to *No-Show*.

Set Deposits for Specific Invoice Types

A new option has been added on the **Deposit Amount Payment** page in BackOffice to mark which invoice type the deposit should be routed to. When an invoice is created from the BackOffice, only deposits marked for the company or paymaster will be used on the invoice.

Print Option for Charges Overview

A new action, **Charges Overview**, has been added on the **Hotel Invoice Management** page. This action opens a report that shows a detailed list of all items charged to the reservation, their receipt number, price, and VAT information.

Early Checkout Penalty Options Aligned With Cancellation and No-Show Penalties

In the cancellation policies, the **Early Checkout Penalty** options have been aligned with the **Cancellation** and **No Show Penalty** options. The options are:

- *First Night* - if leaving 3 days early, then charge **Early Checkout Fee** for the first of the 3 nights
- *Number of nights* - if leaving 3 day early, then it is possible to charge for 2 of these.
- *Percentage* - if the 3 nights have a rate of 100, it is possible to charge 20% of that rate.
- *Fixed amount* - **Early Checkout Fee** is a fixed amount.
- *None*

Default Routing Rule and Rate Code for Customer

The Business Central **Customer** page has been extended with a **Hotel** FastTab where it is possible to set a default rate code and default routing rule for the customer. These will be applied to a hotel reservation when a customer is added to it.

New Cues, Deposit Balance and Open Deposits, in BO Role Center

Two new data cues have been added to the Hotel BackOffice Role Center. These show the

- **Deposit Balance** from the G/L account, clicking this cue opens a list of the General Ledger Entries.
- **Open Deposits** shows the amount of open deposits. Clicking this cue opens a list of Open Deposits.

Qty and No of Persons Shown in the Reservation Activity List in POS

The activity lists on the **Reservation** and **Group Reservation** pages in the POS now show the Qty of activities and the number of persons as a prefix on the activity list. If the Qty or Number of persons is 1, no prefix is added.

Fixed Issues

Retail
BackOffice
Command PRINT_LAST_C With More Transaction Type Filters

When doing a reprint of the latest transaction on the POS, the system now prints the receipt by using the PRINT_LAST_C command with the following transaction types: Sales, Payments, Voided, and Cancellation. Previously, the command only used the Sales type.

LS DE/AT: Missing Transaction Signatures

Transactions created for Float Entry and Tender Declaration are now signed as all other transactions.

LS Hardware Station
Ignored Drawer Status Property

The property *Drawer Status* on the **POS Drawer Card** was being ignored by the LS Hardware Station. This has now been fixed.

Replenishment
Item Division Filter in Replen. Template Page

In the **Replen. Template** page, an issue where the **Item Division Filter** field was not accepting multiple Division Codes has now been fixed.

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LS Central 17.4 Release Notes

About This Release

Released - March 30, 2021

This version is built on Microsoft Dynamics 365 Business Central 2020 release wave 2, cumulative update 5, build 17.5.22499.22546.

Discontinuation of LS Nav

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LS Central 17.4

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LS Central AL code

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LS Central Object Prefixing
One of the requirements for apps on AppSource is to add an Affix to all objects in the app. To prepare LS Central for AppSource, all LS Central objects will be prefixed with the prefix **LSC**. The plan is to release the prefixed objects in LS Central version 17.5, which is scheduled to be released on the 15th of April 2021.

There is a 30-character limit on object names. Over 1000 LS Central objects will exceed that limit when the LSC prefix is added to the object name. These object names will be adjusted, for example by using abbreviations, shortened words, or other naming adjustments.

For all object types except PageExtensions and TableExtensions the prefix is on object level. On PageExtensions and TableExtensions the prefix is on control/field/action level. Captions are not changed. AL source file names are not changed.

All apps that have dependency on LS Central should be tested and adjusted to the prefixed names. **This is a breaking change and upgrades must use ForceSync**.

To help partners to prepare for this change a container with LS Central version 17.2 with prefixed objects is available for download. Get the container on the LS Retail Portal, the Technical Support help desk, where you can also contact Support if you have any questions.

New or Enhanced Features

Retail
BackOffice
"Take Picture" Feature Added to Retail Image Page

It is now possible to use the computer camera directly from the **Retail Image List** and **Retail Image Page** from the **Retail Image Preview** Fact-box.

Customer Order: Notification Setup for Collect and Ship

Processing Status messages in Customer Order can now be customized on one hand for orders that are shipped and on the other for orders that are to be collected in store.

Fashion: Item Variant Lookup/Dropdown

You can now view **Code**, **Description**, and **Description 2** values in the Variant Code lookup/dropdown page from the **Retail Purchase Order** and **Retail Transfer Order** pages.

New GS1 Barcodes Added

GS1 barcodes with the following sections can now be scanned:

- 10 Batch or Lot No
- 17 Expiration Date
- 21 Serial No.

Statement Calculation and Posting Improvement

Performance of the statement calculation and posting functionality has been improved and optimized. The replication counter update procedure has been refactored, which resolves the deadlock issues during statement calculation and posting. Now it is also possible to automatically create and calculate statements for stores and perform statement batch posting in parallel.

Automatic statement creation and calculation

You can now set up the system to automatically create and calculate statements for stores. You can activate this option using the **Auto. Calculate Statement** setting in the **Store Card**, and by scheduling the codeunit *Statement - Auto Calculate (99001479)*. The statements will be calculated incrementally with each calculation to include new transactions.

Parallel statement batch posting

The statements in the batch posting queue can now be posted in parallel with multiple sessions. You can activate this option using the **Enable Parallel Posting** setting in the **Batch Posting Setup** page, and by scheduling the codeunit *Schedule Batch Posting (99001459)*.

For more information see "Calculating and Posting Statements" in the LS Central Help.

For customers on C/AL versions, LS Retail partners can request the SCP (Statement Calculation & Posting) object package, based on LS Central 14, via the [Technical Support](#) help desk on the LS Retail Portal.

Unlock Order Lines

When Customer Order lines are in the picking process and are locked by a POS terminal or a Mobile Inventory device, a BackOffice user can now unlock the Customer Order lines.

LS Hardware Station

Logo Type "Download" Now Available

Logo type *Download* is now available in the Web POS via LS Hardware Station. Until now, this feature only worked in the .NET POS. To add a logo to a receipt, the user can now set the path of a bitmap or other supported logo types in the **Printer Card** in LS Central.

LS Pay in LS Hardware Station Updated to v. 2.21.1

LS Pay in LS Hardware Station has been updated to version 2.21.1. The following properties were added to EFT objects:

- *PointAmount* has been added to *AmountBreakdown*.
- New *enum* values were added to EFTVerificationMethod: CTL; MagneticStripe.
- New variable Installments were added to PurchaseRequest, of type *Installments*.
- New variable *EnablePLB* (Product Level Blocking) was added to PurchasRequest, of type *bool*. If *True*, specific items are being sold that are not included in a gift card scheme. Added for Linkly (EFTPos).

LS Web POS

Dual Display

Dual Display is now available in the Web POS when it is started from the LS Central AppShell, Windows version. It starts automatically when enabled in the **Terminal** card. When used in LS Central AppShell, Windows version, it will open by default on a secondary screen.

POS Key Functionality Implemented

Key commands are now supported in the LS Central POS, for triggering POS commands and button clicks via keyboard shortcuts.

Hospitality
LS Central for Restaurants
New Events in Hospitality POS Startup and Send to KDS

Events on idle timer tick and execute POS command are now in the following codeunits:

- Hospitality POS Startup
- Table List POS Startup
- Allocation Panel Controller
- Act. Din. Reserv. Controller.

Set Hierarchy Dates for Stores

New FastTab, **Hierarchy Date**, has been added on the **Store Card**. This makes it possible to specify which hierarchy and which schedule is in use for specific Sales Types. This is also used for eCommerce and to control which menu is used on the Self-Service kiosk as illustrated in Demo Data for Store S0017 - EasyBurger.

Setup Added to Control Allocation by Capacity

A new setup in the dining area controls whether dining tables should be filtered by capacity when a reservation is allocated.

LS KDS
New Item Comment Style in KDS

KDS style profiles now have a new Item Comment Style which makes it possible to show Time and Text modifiers with a specific color and/or background.

LS Activity
Actions on Reservations

The **Confirm** and **Cancel** actions now confirm or cancel the selected activity lines. New actions, **Confirm All** and **Cancel All**, have been added to confirm or cancel all activity lines for the reservation.

Activity Types and Additional Charges

A new setting to set a product template for Activity Types allows the user to set a default product, when a new product with the Activity Type is created (similar to adding an item category to an item in Business Central).

Now it is also possible to specify default Additional Charges for an activity type, so when a product with this kind of activity type is sold, the system will automatically add these charges to the activity.

Email Option Added to Tasks

Email templates can now be added to the task setup to send emails to a resource that is assigned to a task. You can send a single task or all tasks for the activity to the assigned resources from the **Activity Task Entries** page.

New Page

A new page, **Activity Item Reservations**, shows an item summary of all additional charges for given dates for reservations. You can open the page in the **Activity Manager** role center using the **View** action followed by the **Item Summary** action.

LS Central for Hotels

Activity Charges Automatically Linked

When items are charged to an Activity Reservation using the POS command CHARGE2RES, and this Activity Reservation is linked to a Hotel Reservation, the lines are automatically charged to the Hotel Reservation and marked in the Activity Reservation as **Hotel Charge**. These charges are then paid upon checkout of the hotel reservation.

Managing Group Members

It is now possible to manage Group Members in LS Hotels in the same way as in LS Activity: by sending Excel templates to customers and importing an Excel list with group members back into the reservation.

Non-posted Invoices Shown on POS

If there are non-posted invoices for a reservation, this is shown on the **Manage Invoices** panel in the POS.

Reservation Tile Shows Non-posted Invoice Amount

If there are non-posted invoices for a reservation, this is now shown in the reservation's FactBox pane.

Tape Chart Enhancement

The number of nights since a room was last in use is shown in the upper-right corner of the Tape Chart's **Room** cell.

POS Commands

The following POS commands are new in LS Central 17.4:

- REFRESHRES - Refreshes the POS Web Template for a hotel reservation to see if any new activities or charges have been added to the reservation while it is open.
- REFRESHGROUPRES - Same as above except for a group reservation.

See "POS Commands" in the LS Central Help and the corresponding
Excel list with filters for a complete list of POS commands.

Other

Demo Data

Scheduler Job Name Changes

Omni Server has been renamed to **LS Commerce Service**. The sched-
uler jobs in the Demo Data company for Commerce (previously Omni)
have been renamed accordingly:

- COMMERCE_INIT - replaces OMNI_INIT
- COMMERCE_UPDATE - replaces OMNI_UPDATE
- COMMERCE_INVENTORY - replaces OMNI_INVENTORY

LS Central Help

The online help for LS Hardware Station has been updated and reor-
ganized.

Fixed Issues

Retail

BackOffice

Fixed Quantity Field Updated

In the **Item Label Setup** table the initial value for the **Fixed
Quantity** field is now *1*. Previously, the initial value was *0* when a new
record was made. All existing records that currently have **Fixed Quant-
ity** as *0* in the **Item Label Setup** table will be upgraded to *1*.

LS Forecast

LS Forecast Confidence Interval

When synchronizing items in LS Central with LS Forecast, an issue
where the decimal sign in the Confidence Interval was not converted
correctly for regions that are using comma (,) as decimal separator, has
now been fixed.

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LS Central 17.3 Release Notes

About This Release

Released - February 18, 2021

This version is built on Microsoft Dynamics 365 Business Central 2020 release wave 2, cumulative update 3, build 17.3.20469.20605.

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New or Enhanced Features

BackOffice

Column Width in POS Data Tables

When you add a column to a POS Data Table, the system now checks if the **Preferred Width %** field needs a value for the column to be visible.

Fashion: Manually Load Variant Suggestions

You now have the option to disable the automatic suggestion of all variant combinations in the **Variant Suggestions** page, when using a Variant Framework assigned with the **Registration Type** *Automatic Selection*.

You can activate this option by using the **Disable Auto. Variant Suggestion** setting in the **Variant Framework Codes Card**. When this setting is activated, you can apply Dimension Filters in the **Variant Suggestions** page, and use the **Load Suggestions** action to manually load the

variant combinations. This allows you to load only a subset of the variant suggestions based on the selected filters.

For more information see "Variant Framework" in the LS Central Help.

POS Display Renamed to POS Line Display

Configurations in LS Central for the "Line display" device used to be called "Display" in some instances. All configurations have now been renamed to either "Line Display" or "POS Line Display".

Printing Shelf and Item Labels Through LS Hardware Station

It is now possible to print shelf and item labels to a designated printer for each store, so the printing can be triggered automatically and without the user having to select a printer or confirm a print request. This is done through the setup in LS Hardware Station.
Note: This is only valid for label printers supporting EPL and ZPL programming languages or similar.

Retail Image Link in LS Central Tables

Retail Images have now been linked to the following LS Central tables and are accessible on the relevant pages (lists and cards):

- Dining Area Layout
- Dining Table Property
- Hierarchy
- Hierarchy Nodes
- Item
- Member Contact
- Member Notification
- Membership Card
- POS Media Control
- POS Media Playlist
- POS Printer (Logo)
- POS Menu Line
- POS Menu Header
- Published Offer
- Retail Setup
- Search Index Table
- Staff Management Employee
- Store - Images, Logo, and QR Code

Images are automatically migrated to this new structure by an upgrade codeunit when this version is installed for the first time. Some images might be duplicated (or multiplied), but after the migration all Retail Images that are not linked to any record (owner) are deleted. The **Where Used** function now only looks for usage in the **Retail Image Link** table.

Note: If a **Retail Image** record contains the value *Image Location*, the link is used when displaying an image in LS Central, the location is a URL that points to a source outside the LS Central database. Otherwise, the Retail Image stored inside LS Central is displayed.

A new field, **Link Type**, has been added to the **Retail Image Link** table. This new field has the default value *Image*, but the Link Types *Logo* and *QR Code* are used for **Logo** and **QR Code for Direction** in the **Store** table. This means that when you are looking for an image, you should consider filtering to Type = Type::Image, but not only "Display Order".

LS Hardware Station
Authentication Device
Authentication device is a new name for a device previously referred to as Keylock. Because a keylock device can now be various types of devices that can be used to log on and off the POS, for example Dallas Key, Keylock, or Fingerprint scanner, it was decided to change the name of the device within the LS Hardware Station.

The Authentication device is added to the POS Hardware Profile in LS Central the same way as all other devices, and it can be automatically added to the system using the Detect Hardware functionality.

Improved Device Dialog Messages
The dialog window that appears when you pay with a card now shows improved and more useful messages. When you start or finish an EFT connection, the messages "Starting Session" and "Finishing Session", respectively, are displayed in the dialog window.

When you press the **Cancel** button in the dialog window (which appears if the EFT supports Cancel from POS), the message "Attempting to Cancel" is displayed. Now the **Cancel** button no longer appears when you start or finish a session.

Increased Load Time for Virtual Devices
Virtual device timeout in LS Hardware Station has been increased.

Update With LS Pay
LS Hardware Station has been updated with LS Pay version 2.19.2.38. No new plug-ins were added.

LS Retail Apps
LS Central AppShell
LS Central AppShell, iOS version, has been not working with LS Central from version 17.0. The iOS AppShell can be used with LS Central when it is configured to use the NavUserPassword authentication. Using the

Windows authentication is still not working and the cause for this is being investigated.

In the LS Central AppShell, Android version, the option to pay through the AppShell has been not working with LS Central from version 17.0. This has now been fixed.

Replenishment
New Integration Events for Replen. Calculation Codeunit

New Integration Events have been added to the Replen. Calculation codeunit which let you:

- override the assignment of Replen. Journal Lines parameter before its insertion during Replenishment Journal calculation.
- override the insertion of Replen. Journal Details during Replenishment Journal calculation.

Hospitality
LS KDS
KDS - Recall from list

This is a new operation in KDS that lets you recall an item or chit from a list.

LS Activity
Enhancements in LS Activity

- Product restrictions in Activity can be set to certain times and days for specific club members, membership, or access profiles. This can be useful for operations that are really catering for specific members or clients.

- Standard Customer Discounts are now also applied to lines in the Additional Charges, if applicable.

- Tasks are now issued to an activity and issued tasks are listed in the Reservation FactBox. When looking at the task entries all assigned resources (location, room, and so on) are shown on the Task List FactBox.

- Improved visibility for allowances when using POS Command VIEWALLOWANCE - if an item within an allowance has a location filter that is different from POS location, then these allowance buttons are shown with the Cancel skin.

- LS Activity Web Services has been updated to allow for sending No. of persons. This can affect pricing or availability.

LS Central for Hotels
LS Hotels Enhancements

- Block room for charges is possible by setting **Charge to Room** on reservation as *Closed*.

- New action, **Copy Reservation**, on the **Reservation Card**.

Hotel Reservation Templates Enhancements

- The pages for the Reservations and Group Reservations on the Hotel POS have been enhanced, so they show more detailed information on the reservations.

- These pages are also responsive to the size of the POS device.

- Items that are included in the rate are shown as nested items in the **Rate** section.

- If there are activities on the reservation, the status of those activities is now shown.

- If the activities are included in the reservation rate, then no price is shown for the activity.

Fixed Issues

Retail
BackOffice
Cash & Safe: Automatically Delete Suspended Transaction
The Functionality Profile offers the possibility to automatically delete suspended transactions upon posting a Z-Report. Now this also works when Cash & Safe Management is activated.

Incorrect Discount When Applying a Coupon
When more than one coupon with the same code were used in the same transaction, the second coupon would not apply. This has now been fixed.

LS Web POS

Error in Long Item Descriptions

When selling a scale item with an item description longer than 30 characters, the POS would display an error and not sell the item. This has now been fixed.

Replenishment

Usage of Purchase Order Multiple for Item Store Records Assigned with Warehouse

An issue in Replenishment calculation, where the Purchase Order Multiple is not considered when an Item Store Record is assigned with a warehouse, has now been fixed.

Replenishment Journal

A bug where the Global Dimension 1 and Global Dimension 2 is not updated in the transfer orders created by replenishment journal has been fixed.

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LS Central 17.2 Release Notes

About This Release

Released - January 21, 2021

This version is built on Microsoft Dynamics 365 Business Central 2020 release wave 2, cumulative update 2, build 17.2.19367.19735.

Discontinuation of LS Nav

LS Retail policy for LS Central is that new features and fixes go into the next new release, not previous releases. When LS Central 15.0, the first AL version, was released, it was decided to make an exception to this by continuing to release fixes and new events in LS Nav 14.x for a limited time. Now the time has come to end this exception. The last version of LS Nav 14, version 14.04, will be released in January 2021.

All open support tickets related to versions prior to LS Central 15.0, that is all tickets related to LS Nav, will be closed. Partners can submit new tickets for LS Central if the issue still applies there.

LS Central 17.2

LS Central 17.2 is delivered as an extension with dependency on the Business Central Base App. This means that LS Central does not make any changes to the Business Central Base Application. The release package includes both the runtime app and the source code.

LS Central AL code

The source code is delivered in AL files that can be modified by partners. It is, however, highly recommended to make all modifications in extensions, and if you need to alter the LS Central or Business Central behavior then do that by subscribing to events.

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

LS Central extension

The release package includes LS Central as a runtime app that can be installed as an extension. To install the extension, you first need to publish it, see Publishing and Installing an Extension v2.0. Once the

extension has been published, the LS Central extension can be installed using the **Extension Management** page in Business Central.

Important Notice for an Upcoming Release

LS Central Object Prefixing

One of the requirements for apps on AppSource is to add an Affix to all objects in the app. To prepare LS Central for AppSource all LS Central objects will be prefixed with the prefix **LSC**. The plan is to release the prefixed objects in LS Central version 17.4, which is scheduled to be released on the 18th of March 2021.

There is a 30-character limit on object names. Over 1000 LS Central objects will exceed that limit when the LSC prefix is added to the object name. These object names will be adjusted, for example by using abbreviations, shortened words, or other naming adjustments.

For all object types except PageExtensions and TableExtensions the prefix is on object level. On PageExtensions and TableExtensions the prefix is on control/field/action level. Captions are not changed. AL source file names are not changed.

All apps that have dependency on LS Central should be tested and adjusted to the prefixed names. **This is a breaking change and upgrades must use ForceSync**.

To help partners to prepare for this change a container with LS Central version 17.2 will be made available for download. Get the container on the LS Retail Portal, the [Technical Support](#) help desk, where you can also contact Support if you have any questions.

New or Enhanced Features

Retail

New Action: Test Publishers

A new action, **Test Publishers**, has been added to the **Web Service Setup** and **Web Requests 2.0** pages. The action lets you test web connections when setting up publisher.

LS Forecast

LS Forecast Monthly Calculation

LS Forecast now lets you calculate forecasts on a monthly level, which is well suited for lower priority items and further reduces the forecast calculation cost.

To translate monthly forecasts into daily quantities for Replenishment, the **Monthly Sales Buckets** have been introduced. These buckets provide an overview of the item's sales distribution pattern across the month, grouped into 31 days, corresponding to day 1 until day 31 of the month. This pattern is calculated for item groups and locations from historical sales data, and then serves as distribution weight to break down monthly forecasts into daily quantities to be used in Replenishment Journal calculations.

For more information see "Monthly Sales Bucket Calculation" in the LS Central Help.

LS Hardware Station
PDF Printing on Windows Printers
PDF documents can now be printed on Windows printers in LS Hardware Station via Web API. LS Central uses this functionality to print reports and A4 receipts.

Replenishment
Considering Replen. Sales History Adjustment in Retail Sales Budget
The **Create Budget from Sales** functionality in **Retail Sales Budget** can now also consider the values from Sales History Adjustment. During the budget calculation, the values from the Sales History Adjustments will be added on top of the Quantity, Sales Amount, and Cost Amount of the Retail Sales Budget Entry, which are calculated from the Value Entries. The Sales Amount and Cost Amount originating from the Sales History Adjustments will be calculated by consulting the Unit Price and Last Direct Cost of the item.

Furthermore, new Integration Events are also added to the **Create Sales Budg. from Sale** report. This lets you override the functions that retrieve the Unit Price and Last Direct Cost of the item, if needed.

For more information see "How to: Create a Sales Budget from Sales Data" in the LS Central Help.

Hospitality
LS Central for Restaurants
LS Food and Beverage Enhancements
There are now two ways of controlling the flow of the **Split Bill** panel: when you are splitting or moving lines between guests, you either select the guests before or on splitting/moving lines. This also works for the phone view.

Allocation Panel Enhancements

- You can now control the view in which the **Allocation** panel opens (Timeline, Graphical, or Table List). Default is Timeline.
- The **Allocation** panel now has a period filter menu. You can press a period and then the panel shows dining reservations only for this period, and the time of the panel changes to the first interval for the period. When you allocate, the period filter is taken into consideration.

Reservation Desk Enhancements

- Interval type and time limit for table reservation availability. The Activity Product that has DINING custom availability gets its intervals from the dining area setup. If the Activity Product has an Interval Type with times set up, the availability times from the dining area are filtered to show only those intervals set up for the product.
- If a restaurant has different periods, like lunch and dinner, and these have different intervals set up, for example lunch has 15 min. slots while dinner has 30 min. slots, then these are now shown on the **Reservation Desk** panel.

LS KDS
New Operation in KDS: Group

When you press this option, a new **GroupBy** panel opens (similar to ServeItem in the chit panel). The panel shows the number of unique combinations of **Items and Modifiers**. The panel has the following operations:

- UP (=Next item combination)
- Down (=Previous item combination)
- Close (=Bump, closes the panel)

LS Activity
LS Activity Enhancements

- If an Activity product has a fixed location that location is automatically assigned when using the POS commands **SellProduct** and **BookProduct**.
- New setup lets the user exclude location from the assignment logic. When a new activity is created, the system automatically adds it to any active reservation the client might have if this is not set. This is useful when LS Activity has many locations within the same physical location.

- When resources in LS Activity are set up, it is now possible to create employees in LS Staff Management from these resources.
- In the Activity Resource Groups setup, a new action, **Create Employees**, creates an employee for each resource in that resource group and sets the name, work location, phone, and email based on the resource.
- Membership has been added to the LS Activity archive mechanism.
- New POS command, VIEWALLOWANCE, shows outstanding allowance for the active reservation in the POS.
- New summary of activity statuses in the group line FactBox. For example, if there are 20 activities within the group, 18 are confirmed and 2 are not, then this is shown in the FactBox .
- New setup on the Activity user to specify if they are allowed to change prices on activities. The available settings are: *None, All, Activities Only, Additional Charges Only*.

Matrix Enhancement

- Drag-and-drop of reservations is now supported in Activity matrixes, and can be controlled on the **Matrix Template Card**.
  Note: This is only supported on the Matrix in BackOffice.
- It is now possible to view hover text on reservations by assigning user-defined HTML scripts. This is set on the **Matrix Template Card** in the **Tooltip Script** field.

LS Staff Management
LS Staff Management Enhancements

A new action, **View Totals for Employees**, has been added to the Staff Management Role Center. The action opens a new page to view employees' work history. The user can set up dynamic calculations that can be used to present the employees' work history.

LS Central for Hotels
LS Hotels Enhancements

- When the dates on a reservation group are changed, dates on reservations within the group change accordingly.
- It is now possible to extend an in-house reservation.
- Canceling a reservation now creates a balance on the reservation according to the reservation's cancellation policy.
- It is now possible to lock a room reservation to prevent accidental changes.
- Comments can now be added to Group Reservations and they are shown on **Group Reservation** on the POS.

- A new field, **External Reservation No.**, has been added to reservations.
- Items can now be charged to group reservations.
- Early checkout can be done on group reservations.
- In the previous release (17.1), grouping room types was introduced. Now it is possible to toggle between these groups by room type or view the rooms by room number.
- A new hover functionality on reservations quickly shows the reservation details.

POS Commands

The following POS command is new in LS Central 17.2:

- VIEWALLOWANCE - Show allowance items in menu. This command creates menu buttons (in the main menu area) to present which Retail/Hospitality items are part of the current customer's outstanding allowance.

See the "POS Commands" in the LS Central Help and the corresponding Excel list with filters for a complete list of POS commands.

Demo Data

Demo Data Changes

The LS Central Demo Data company has been changed. It is now based on Business Central Demo data version 17.2, the Evaluation package.

Other

LS Central Help

Help for LS Data Director, LS eCommerce, and LS Omni has been added to the LS Central Help. LS Data Director Release Notes are also accessible now in the LS Central Help.

Fixed Issues

Retail

BackOffice

Transaction Type "No Stock Posting" Removed

The transaction type *No Stock Posting* has been removed in sales documents and on the POS and will be replaced by using the item type *Non-inventory*.

Note: If an item has recorded inventory movement, the *No Stock Posting* flag must be off before LS Central is upgraded. A new item will have to be created with the type *Non-inventory*.

LS Hardware Station Print Time

LS Hardware Station printing implementation has been changed in order to avoid reloading printers more often than is necessary.

This can speed up the printing process, for example when printing on dot matrix printers that take a long time to reload.

Replenishment
Date Formula in Replenishment Calculation

During replenishment calculation, an issue where the date formula is not converted correctly when the system language is other than English, has now been fixed.

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LS Central 17.1 Release Notes

About This Release

Released - December 17, 2020

This version is built on Microsoft Dynamics 365 Business Central 2020 release wave 2, cumulative update 1, build 17.1.18256.18792.

Discontinuation of LS Nav

LS Retail policy for LS Central is that new features and fixes go into the next new release, not previous releases. When LS Central 15.0, the first AL version, was released, it was decided to make an exception to this by continuing to release fixes and new events in LS Nav 14.x for a limited time. Now the time has come to end this exception. The last version of LS Nav 14, version 14.04, will be released in December 2020.

All open support tickets related to versions prior to LS Central 15.0, that is all tickets related to LS Nav, will be closed. Partners can submit new tickets for LS Central if the issue still applies there.

LS Central 17.1

LS Central 17.1 is delivered as an extension with dependency on the Business Central Base App. This means that LS Central does not make any changes to the Business Central Base Application. The release package includes both the runtime app and the source code.

LS Central AL code

The source code is delivered in AL files that can be modified by partners. It is, however, highly recommended to make all modifications in extensions, and if you need to alter the LS Central or Business Central behavior then do that by subscribing to events.

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

LS Central extension

The release package includes LS Central as a runtime app that can be installed as an extension. To install the extension, you first need to publish it, see Publishing and Installing an Extension v2.0. Once the

extension has been published, the LS Central extension can be installed using the **Extension Management** page in Business Central.

The following is a list of changes and key features in LS Central 17.1.

New or Enhanced Features

Retail
BackOffice
Enhancements to the Web Service Setup Page

The **Web Service Setup** page has the following changes:

1. The **Web Requests** action that was accessible from the **Web Service Setup** page has been renamed **Web Requests 1.0**. Previously, when you opened the **Web Service Request** page from the **Web Service Setup** page, web requests from both Web Requests 2.0 and 1.0 were displayed. Now, however, there is a filter that only displays web requests from version 1.0 as the name indicates.

2. The **Web Requests** page, which is accessible from the **Search** () icon and only included web requests from version 2.0, is now accessible from the **Web Service Setup** page by clicking the **Web Requests 2.0** action.

3. The **Web Services** page, which is accessible from the **Search** () icon and displays the web services, is now accessible from the **Web Service Setup** page by clicking the **Web Services** action.

4. If you search for **Web Requests**, the new name in the search result is **Web Requests 2.0**. The page has been renamed to clearly indicate that now it only includes web requests from version 2.0.

5. **Base URL**, a non-editable field in the **Web Requests** page that indicates the URL for web requests 2.0, is also displayed in the **Server** FastTab in the **Web Service Setup** page.

Note: The **Publisher** action in the **Web Requests** page has been changed so that it only affects published web services (removes the old ones and publishes again) and not subscriber web requests. Before the code change, the **Publisher** action also deleted the subscriber web requests, but not so anymore.

New Functionality: Direct Printing of Reports

It is now possible to trigger the printing of reports in PDF format directly to a selected printer that is connected to the LS Hardware Station.

The Business Central **Printer Selection** page has been extended with three new fields: **Hardware Station Host**, **Hardware Station URL**, and **Run Request Page**.

- **Hardware Station Host**
  In this field you can specify the printer to which you want to direct your printing for the active **Printer Selection** entry. If a printer is also selected in the **Printer Name** field in the entry, that printer will take priority and all printing will be directed to that printer. Before you can select a printer, you first need to open the **POS Hardware Profile** card and run the **Detect Hardware** action. This will load all available printers into the **POS Printer** table.

- **Hardware Station URL**
  This field is a non-editable connection string URL consisting of the Host and Printer name along with fixed commands.

- **Run Request Page**
  This field specifies if you want the **Report Request Page** to be opened before printing, or if the report should go directly to the printer.

New eCommerce Request to Get Customer Prices

This new request uses the common mobile transaction data structure.

The request uses a member card number to find the member account, and where the account is linked to a customer, the web store customer number is substituted with the linked customer number. Therefore, the request will be based on the linked customer, not the web store customer. The request in itself finds the customer prices and discount for the items in the mobile transaction lines.

- For the mobile transaction header, required fields are: **ID**, **StoreId**, **TransactionType = 2**, **TransDate**, and **MemberCardNo**

- For mobile transaction line, required fields are: **ID**, **StoreId**, **LineNo**, **Number**, and **Quantity**

Some additional fields may be used, such as **VariantCode** and **UomId**. The response holds the customer price and discount in the **Price** and **DiscountPercent** fields.

Note: When calculating a basket, the combination of customer and customer discount is used to construct what is known on the POS as customer price. This customer price is then used to calculate the final price for the customer as a discount from the normal retail price. That is, customer price is always represented as discount in any basket calculation.

New Extension Fields on Mobile Device Documents

Three new user-definable fields have been added to the *SendDocument* and *GetDocument* web services: **Ext. Field 1**, **Ext. Field 2**, and **Ext. Field 3**. You can access these fields through Publishers in Codeunits GetDocument and WS IM Request.

New Field to Run a Page in the Mobile Inventory App

A new field has been added to the **Inventory Menu**. This is a free-text field that is intended to host a URL for the Mobile Inventory App to directly run a selected page in Business Central.

Export and Import Retail Images

Now you can export and import retail images to and from .zip files. You can filter on images that you want to export, the images are exported to a .zip file. When you import images from a .zip file and there are images with the same code in the database, you can choose if images should be overwritten or not.

For more information see "How to: Import and Export Images from a Zip File" in the LS Central Help.

Hospitality
LS Central for Restaurants
Line Discounts for Deals

It is now possible to apply line discounts to a deal within the journal. This will add a discount percentage or amount to the deal and apply a proportional discount to each item within the deal.

Show On Hold Status and Start Time on Printed KOTs

If a KOT is sent to KDS with status *On Hold* for X number minutes, this information is now printed on the KOT with the new start time.

LS KDS
KDS KPI

New KPI that shows the number of orders (chit display) or items (line display) on a display station has been added. The KPI can be added to a **KDS Header Profile** in the **KDS Header Pane Designer** with the **Column Type** *Order/Item Count* in the **KDS Header Pane Columns.**

Chit Time on Station

New timer on chits has been added. The timer shows the time that a chit has been on a station. Usually, this will be the same time as the time sent to the kitchen, but if the Chit station is set to *Show only when Bumped on Prior Stations*, this timer starts when this criteria is fulfilled. The setting for the timer is set on the **KDS Display Profile** for chits.

LS Staff Management
Staff Management Enhancements
If an employee rejects a work request, this is now shown in the roster with an entry of **XCD** for better visibility.

LS Activity
Pricing of Additional Items in Activity
New setting has been added in the LS Activity setup to specify which Retail price should be picked for additional items in a reservation. The price can be set by **Booking date** or the **Reservation date**.

It is also possible to set specifically on an additional item in an Activity product how the price handling should be, if it should be using the current retail price or if the retail price should be set using the Reservation date. This is useful, if the reservation date is in the future and the retail price of the product for that date is different from the price when the booking is created.

Membership Enhancements
The issuing of single-sale memberships will now create a batch "single sale" and add a batch line there, regardless whether it was issued by the POS or a BC invoice. So all issuing of new memberships will create a subscription batch, either initial sale (if subscription) or a single-sale batch (if it is not a subscription). This will make the issuing of new memberships more transparent and make the flow of issuing allowances the same as a normal subscription process. Single-sale batches are also posted automatically during the sales process, and the related membership status is automatically assigned as well.

All memberships that are single-sale will be issued to a "single sale" batch, regardless if they are issued via invoice, POS, or web. The batch will get the issued date as the Code identification, so all issued memberships at a specific date will be collected into the same batch. Single sale batches do not need to be posted, since they are automatically posted during the invoice or POS sales process. Also, Allowances (if any) are issued automatically.

Note: The batch creation is only for transparency and tracking reasons.

LS Central for Hotels
Hotel Enhancements
Now hotel reservations are created in draft mode, if they are not confirmed. Previously, a reservation was temporary until it had been confirmed, but the enhancement gives the possibility to create a draft and continue working on the reservation until it is confirmed.
Note: The rooms are not reserved until the reservation has been confirmed.

Color variables have been added to the CSS for all Hotel Web Templates in the POS Web Templates. This makes it easier to change the style for the Hotel POS.

Tape Chart Enhancements

Rooms are now grouped by room type, showing the available number of rooms for each day. The room types can be collapsed or expanded.

The reservations are also shown in the middle of the day of arrival and departure. This improves the visibility of the tape chart for when a reservation is arriving and departing.

Hotels With Activity Enhancements

The lookup for an activity client is filtered on the guest list of the hotel room, when an activity reservation is linked to a hotel reservation.

Now the guest name, dates, email, and customer name are synchronized between the Hotel Reservation and the Activity Reservation.

In the Hotel POS, in the Reservation Detail, the activities are now grouped by guest, giving a better overview of the guests' activities.

Hotel Group Reservations

The Guest List for Hotel groups has been enhanced, to always be up-to-date when groups are changed. The guest list is also synchronized with the **Activity Group Member** list, if LS Activity is used with LS Central for hotels to keep track of Activity Group reservations.

Other
LS Central Help

Breaking Changes and Hotfixes is a new feature in the LS Central Help. This is a list of breaking changes and hotfixes in current and previous releases.

You can access the list from the [Home page](#), the Breaking Changes and Hotfixes section in the right navigation pane, and also from the [LS Central Release Notes](#) menu in the side navigation panel.

Fixed Issues

Retail
Replenishment
Cross Docking Actions in Retail Purchase Order

An issue where the **Planned Cross Docking** and **Adjust Cross Docking** actions were missing in the **Retail Purchase Order** page has now been

fixed.

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LS Central 17.0 Release Notes

About This Release

Released - November 26, 2020

This version is built on Microsoft Dynamics 365 Business Central 2020 release wave 2, build 17.0.16993.0.

Discontinuation of LS Nav

LS Retail policy for LS Central is that new features and fixes go into the next new release, not previous releases. When LS Central 15.0, the first AL version, was released, it was decided to make an exception to this by continuing to release fixes and new events in LS Nav 14.x for a limited time. Now the time has come to end this exception. The last version of LS Nav 14, version 14.04, will be released in December 2020.

All open support tickets related to versions prior to LS Central 15.0, that is all tickets related to LS Nav, will be closed. Partners can submit new tickets for LS Central if the issue still applies there.

LS Central 17.0

LS Central 17.0 is delivered as an extension with dependency on the Business Central Base App. This means that LS Central does not make any changes to the Business Central Base Application. The release package includes both the runtime app and the source code.

LS Central AL code

The source code is delivered in AL files that can be modified by partners. It is, however, highly recommended to make all modifications in extensions, and if you need to alter the LS Central or Business Central behavior then do that by subscribing to events.

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

LS Central extension

The release package includes LS Central as a runtime app that can be installed as an extension. To install the extension, you first need to publish it, see Publishing and Installing an Extension v2.0. Once the

extension has been published, the LS Central extension can be installed using the **Extension Management** page in Business Central.

The following is a list of changes and key features in LS Central 17.0.

New or Enhanced Features

Retail
New Option to Send Transactions from the POS Using Web Replication
LS Central has a web replication way to send transactions from the POS using Web Request SendTransaction version 2.
In LS Central 17.0 a new option has been added using Web Requests directly.

This new option is:

- More general, no definition is needed for the fields since by default all fields are included.
- Easier to extend.
- Not as fast as the other option.

Additionally, this new option provides an event that makes it easy to add tables to the process queue. All fields for the additional tables are included by default as well.

To activate this option, change the following on the **POS Functionality Profile Card**, the **Transaction Server and Web Services Settings** FastTab:

- Enable the **Use Background Session** option. Enabling is mandatory in order to use this type of Web Replication method.

- Enable the **Use Web Replication** option.

Other setup

The new **Use Web Replication** flag replaces the normal **SendTransaction** web request, and depends on the same fundamental setup, such as whether this service is active, where to connect to, and so on.

Note: This new option depends on the newly introduced **Web Replication** module, which is composed of four web requests: REPL_START_PACKET, WEB_REPL_ADD_TABLE, WEB_REPL_EXE_PACKET, and WEB_REPL_END_PACKET.

How to extend this web replication method

Subscribe to event *OnAfterLoadTransactionTables* in codeunit 99009519 Web Request Data Mgt, and add new table data. Here an

example of such code (here based on the LS Central *Trans. Sales Entry* table):

```
//Trans. Sales Entry
TransSalesEntry.SETRANGE("Store No.", TransactionHeaderTemp."Store No.");
TransSalesEntry.SETRANGE("POS Terminal No.", TransactionHeaderTemp."POS Terminal No.");
TransSalesEntry.SETRANGE("Transaction No.", TransactionHeaderTemp."Transaction No.");
RecRef.GETTABLE(TransSalesEntry);
WebRequestFunctions.LoadTableData(RecRef, BufferUtility);
```

Web Replication Clean Up

The new **SendTransaction** option will affect how data is loaded.

Until now, extending the data load has been defined through the published event *OnAfterLoadTransactionTables* in codeunit **SendTransactionUtils** (10033046). After this change, this will be through the published event *OnAfterLoadTransactionTables* (same name) but in codeunit **Web Request Data Mgt.** (99009519).

This will only affect those who have already extended the **SendTransaction** request by using this event. The change is necessary to eliminate duplicate code to handle this load.

BackOffice

Basket Calculation for Customers

eCommerce now supports customer-based price calculation.

When calculating a basket that provides a member card number and the card is linked to a member account where the account is linked to a customer, the web store customer number is substituted with the linked customer number. Therefore, the basket calculation will be based on the linked customer, and not the web store customer.

Fields Removed or Renamed

The field **Mobile Phone No.** was added to the **Customer** table in BC Base app version 17. There was a field with the same name in the LS Central **Customer Extension** table. This field has been renamed to **LSC Mobile Phone No.** and obsoleted. Data is copied from the extension table to the BC Base table.

The field **Statement No.** in table extension for **Gen. Journal Line** has been renamed **LSC Statement No.**, since Microsoft added the **Statement No.** field to its standard table.

New eCommerce Return Policy Web Service

A new web service has been created to return a "Return Policy" per Store, Item Category, Product Group, Item, or Item Variant.

LS Central POS
Enhancements in POS Hardware Profile
Detect Hardware
The Detect Hardware functionality has been changed to never overwrite existing devices. Now if a device was previously added to the Hardware Profile using the **Detect Hardware** action, the device is left untouched by the user running the **Detect Hardware** action again. This means that if any properties were changed after the device was created, they will remain as they are.

If a device was manually created and added manually to the Hardware Station (not created automatically by the **Detect Hardware** action), the device will not be updated or removed by the **Detect Hardware** action at all.

Update Hardware Station Host
A new action, **Update Hardware Station Host,** has been added to the Hardware Profile where the user can update all devices on the Hardware Profile to have the same Hardware Station Host as is currently on the Hardware Profile.

PreAuth Functions and Payment Token Support Implemented in EFT
EFT functionality has been updated to create and handle Pre-Authorizations on the POS.
PreAuths will show on the POS Journal and can be voided/cancelled, updated, or finalized on the POS with the [new POS commands](#) supplied, PREAUTH, PREAUTH-FINALIZE, and PREAUTH-UPDATE.

With PREAUTH-FINALIZE, a Pre-Auth is converted to a payment. The amount can only be lowered and will be lowered by the POS if the transaction balance is lower than the Pre-Auth amount.

The EFT functionality now supports payment tokens. When a token is returned in an EFT transaction, it is stored in LS Central. If a payment token is available, it is sent with EFT commands and can be used by the PSP that is connected to LS Pay. This functionality is subject to the functional availability of the PSP used.

Removal of POS DLLs: LSContextModel and LSDataSet
All usage of the LSContextModel/LSContextModelCollection DotNet symbols in AL have been refactored with the "POS Context" codeunit or alternative Json/Text representation in the same places.

The global POS Context for the currently running POS has been unified into a single-source-of-truth.

So all these methods, along with the context in the POS itself, end up in the same place which decides what to show, for example in a button description with a POS Tag:

```
POSCtrl.SetValue
POSCtrl.GetValue
POSCtrl.ClearValue
POSSession.SetValue
POSSession.GetValue
POSSession.DeleteValue
POSCtrl.DeleteDataByTag
POSCtrl.UpdatePosContext
POSCtrl.AddContext (does the same as UpdatePosContext now)
POSCtrl.SendContext (does the same as UpdatePosContext now)
POSContext.SendToPOS (removed, use POSCtrl.UpdatePOSContext instead)
POSView.GetContext (removed and not recommended)
POSSession.GetContext (renamed to POSSession.UpdateContext and not recommended)
POSTransaction.UpdateContext (not recommended)
```

All usage of the LSDataSet/LSDataSetCollection DotNet symbols in AL were replaced with the LSDataSet/LSDataSetCollection Codeunits.

So *DotNet LSDataSet* becomes *Codeunit LSDataSet* and *DotNet LSDataSetCollection* becomes *Codeunit LSDataSetCollection*.

Simplified Modal Functions

Modal functions have been simplified in the **EPOS Control Interface** codeunit. They no longer return any values, since AL cannot wait for any input from the web client (it is async).
This results in the following breaking changes:

1. All calls to ShowPanelModal that use its return value will need to be refactored.

   Examples of these cases are when the return value is used:

   - in conditional statements (if/case):

   ```
   if not PosCtrl.ShowPanelModal(…) then exit;
   becomes:
   PosCtrl.ShowPanelModal(…);
   exit;
   ```

   - as a return value (exit parameter):

   ```
   exit(PosCtrl.ShowPanelModal(…));
   becomes:
   PosCtrl.ShowPanelModal(…);
   exit(false);
   ```

   - in a boolean variable assignment:

   ```
   b := PosCtrl.ShowPanelModal(…); // where b:
   Boolean
   becomes:
   ```

```
PosCtrl.ShowPanelModal(…);
b := false;
```

2. The following methods are now obsolete and will soon be removed; they all have a simpler alternative:

```
ShowPanelModalWithPayload
OpenNumericKeyboard with return value
OpenNumericKeyboardEx
OpenAlphabeticKeyboardExe
OpenAlphabeticKeyboardEx
OpenAlphabeticKeyboard with return value
OpenAlphabeticKeyboardWithPasswordchar
OpenCalendar with return value
OpenCalendarEx
```

Using the return values has been discouraged since LS Retail started using the Web Client in LS Nav 2015.

The recommended pattern is that opening a modal should be the last thing your procedures do.

Any following logic should be caused by subscribing to the **EPOS Controler** codeunit's *OnXXXXResult* integration events, for example *OnModalPanelResult*.

LS Forecast
LS Forecast Calculation with Variant Grouping
Item Variants Forecast Calculation on Group Level
You now have the option to define if the LS Forecast calculation should be performed on each combination of item, variant, and location. Or, if you would like the variants from the same item to be calculated as a group. The latter option reduces the number of combinations and forecast calculations, as LS Forecast will look into the sales history and predict future sales trend of the variants as an aggregation. This option can be activated using the **LS Forecast Variant Grouping** setting in the Item's **Replenishment Control Data** page.

For more information see "How to: Set Up Items for LS Forecast" in the LS Central Help.

Breakdown of Group Forecast Results with Variant Sales Bucket
When the group forecast result is downloaded from LS Forecast into LS Central, the result will be broken down to variant level using the **Variant Sales Bucket**. These buckets provide an overview of the item's variants sales distribution pattern, which is calculated using the historical sales data of the variants for a specific location, or for all locations. The post-breakdown forecast entries will be used in Replenishment Journal calculation.

For more information see "Variant Sales Bucket Calculation" in the LS Central Help.

LS Hardware Station

NLog Replaces LS Log

A new logger was added to LS Hardware Station. Log messages are now more detailed and less likely to have concurrency issues with the main program. This makes it easier to find the cause of any issues.

Printing Enhancements

Printing through EFT devices via LS Pay has been added to the LS Hardware Station by the implementation of the PrintAsync from LS Pay API.

Scale Device Added to LS Hardware Station

The scale device has been added to the LS Hardware Station and the functionality of weighing scale items through the LS Central POS has been reintroduced to the LS Central solution. The online help topics on scale functionality and LS Hardware Station setup have been updated as well.

For more information see "How To Set Up Scale Device", "How to Set Up Virtual Scale for POS", and "How to Set Up LS Hardware Station" in the LS Central Help.

The scale functionality is as it was before in the POS with some minor changes:

- The scale device is now configured in the **POS Scale List** and added to the Hardware Profile (the same as other devices).
- If the scale should calculate the tare into the weight that is returned, the **Tare Calculation** option on the **Scale Device Card** must be turned on. **Note:** This configuration is the opposite to how it was before.
- New configuration was added to the POS Functionality Profile, called **Pad Multiple Items Symbol**. It can be used when deciding how the item sale information should be formatted to the customer through Line display or printed receipts.
- Print compression now listens to a "Manual weight" flag and does not compress those items with scale weighted items.
- The Virtual scale in the LS Hardware Station has been updated and reflects now more functionality that is possible in actual scales.

Note: This implementation has not been certified. We are currently working on the European certification and will send out an announcement once the certification is finished. For other countries, the process will be similar as with previous versions.

Hospitality
LS Activity
Set Currency Code for Activity Module

If there is a need to operate with activity and reservation prices in other currencies than the accounting currency, it is now possible to set a currency code in the **Activity Setup** card.

The POSs associated with the activity entries must be based on the same currency as this Activity currency. Reservations can be set in a specific currency for quotes and invoices and a new tile has been added to the FactBox to show the balance in the reservation currency.

Apply Standard BC Customer Discounts to Activities

If the customer that is added to a reservation has any discounts set up for the Activity products, these are now applied to the activity.

Group Enhancements

Sometimes it is not necessary to expand a group reservation to individual reservations for each group member - this makes it possible to create "common" activities for the group. Therefore, a new option has been added to the reservation types, *Group Reservation Expanding*, which controls if the group only expands to the paymaster and not to individual bookings.

Matrix Enhancements

To improve the usability of the matrix, new options to Check Resource schedule have been added in the **Matrix Template Card**:

- *No* - (default)
- *Yes* - Removes resources without schedule (that is opening hours, scheduled, staff man schedule) from the resource list, and also for Qty based resources, it removes intervals with no scheduled qty.
- *Per Day* - removes resources without schedule only (see information on the *Yes* option)
- *Per Interval* - removes qty based resources from interval only (see information on the *Yes* option).

New possibility has been added to control the resource captions in the Matrix by adding a Resource Caption Script on the **Matrix Template Card**. Set the script to show the Resource caption - leave blank for default handling. **Note:** Only fields from the **Activity Resource** table are valid in the caption script.

New Activity Events

The following events have been added to LS Activity:

- OnBeforePOSCommand
- OnAfterPOSCommand

- OnBeforeChargeToReservation
- OnBeforeFindPrice

Product Search

The product search has been improved, so it is now possible to set an **Activity Type** criteria on the **Activity Start Booking** page to narrow the products listed on the page.

It is also possible to add search tags to the activity products and these can be used to search for products using the standard BC search. There is also a new action, **Keep Search**, which will keep the search word in the search criteria and then it is possible to add another search text to further narrow the search.

Reservation Enhancements

- It is now possible to use the standard Attach Document process to attach documents to the **Reservations** and **Group Reservations**.

- New setting on the **Reservation Type** to show **Task Schedule** as a Fast Tab on the **Reservation Card**.

- New settings in Activity Setup: **Always Create New Members**, **Default Member Club**. This will create a new member in the default member club, if name and either phone or email are pop-ulated for activity, reservation, or group members but no member contact assigned, then create a new member contact auto-matically during entry.

- It is also possible to search for both phone and email in the **Name** field on the **Reservation Card** and the **Activity Card** - this only works if the **Contact No.** field is blank.

Resource Enhancements

Sometimes a resource does not have the capability of the product when assigned as required resource - now the user is prompted, if the sys-tems should assign the capability automatically instead of having to do that manually.

LS Central for Hotels

Customer Discounts

If the customer that is added to a reservation has some discounts set up for the accommodation products, then these are applied to the reser-vation.

Hotel Group Reservations (also with Activity Groups)

The Guest List for Hotel groups has been enhanced, so it is always up-to-date when groups are changed. The guest list is also synchronized

with the **Activity Group Member** list, if LS Activity is used with LS Hotels to keep track of Activity Group reservations.

Hotel Price Management Enhancements

It is now possible to manually override the price for the rooms in the **Invoice Management** page. If a night audit job has been run on lines that are being changed, the system will create the necessary corrections on the temporary accounts used in the night audit process.

Rate Code Enhancements

The **Rate Codes** have been changed to contain **Rate Code Attributes** - this replaces the Breakfast Package and Hotel Package previously on the rate codes. Now it is possible to set Rate Code Attributes that can be items, packages (hotel packages), and/or Activity products (if using LS Activity). These attributes are then added to the reservation based on the posting pattern set on the attribute. If an activity package is set with a daily posting pattern on a rate code, then all of the activities within that package are created when you confirm a hotel reservation.

Hotel **Rate Codes** can be defined in other currencies than the base LCY. **Note:** The Rate Code is set in a specific currency, but it is converted to the LCY Currency on the reservation.

Reservation Enhancements

It is now possible to use the standard **Attach Document** process to attach documents to Reservations and Group Reservations.

A new setting on the Reservation Type shows **Reservation Comments** as a Fast Tab on the **Reservation Card**. The same Task management framework as in LS Activity is now also available in LS Central for hotels. Tasks can be set up for Reservation Types, Room Types, and Rate Codes that are created when a reservation is made. The tasks are shown as a tile in the Role Center and when clicked the task list opens.

The Cancellation policy that is on the Rate Code is now copied to the reservation when confirmed.

It is now possible to create a reservation with a guest without an email - the system still creates a member contact but without an email.

Restrictions, New Field

A new field has been added on the **Restriction** page to enforce restrictions. If you select this field, the action is not allowed; otherwise, the user gets a warning message and he or she can bypass the restriction.

Role Center

The **No Show** tile in the Role Center has been set to show the *No Shows* for the past three days.

Tape Chart (Calendar View) Enhancements

It is now possible to view unallocated reservations on the Tape Chart and allocate them by dragging and dropping to a room. The panel for unallocated reservations is visible, if there are unallocated reservations for the dates that the Tape Chart is showing. If there are no unallocated reservations, the panel is hidden.

You can also drag and drop reservations from one date to another. If the change involves a change in price, the **Rate Change** page will open for you to review and confirm the change.

The Tape Chart can now be sorted and filtered on *Room Type*.

LS Central for Restaurants

Enhancements to the Reservation Desk and Allocation Panel

The **Reservation Desk** and **Allocation Panel** have been further enhanced for improved process flow and usability. Open reservations can be set as *No-Show* and there is an improved flow on Canceling Reservations and Waitlist entries. If a reservation is canceled or moved, the waitlist is checked so the user can move a waitlist entry to a reservation.

Change Sales Type by Selection

It is now possible to set a different Sales Type on a transaction or item by a selection from a pop-up. This is done by leaving the parameter field empty for the following POS commands:

- CHSALESTYPE_TRANS
- CHSALESTYPE_LINES
- SETSALESTYPE_TRANS
- SETSALESTYPE_LINES

Web Templates for Reservation Preferences

New POS web templates have been added, **DR-Member** and **DR-Member-Large**, to the **Reservation Desk** and to the POS layouts for S0005. These web templates show the reservation preferences made at the Reservation desk and these preferences are then visible on the POS when serving the customer.

POS Commands

The following POS commands are new in LS Central 17.0:

PICK_ALL	Customer Order Pick all lines
PICK_LINE	Customer Order Pick line
PREAUTH	Pre-authorize payment with card
PREAUTH-FINALIZE	Finalize a Pre-authorized payment with card
PREAUTH-UPDATE	Update Pre-authorized payment with card
TOOLTIP	Request tooltip data on hover
TOOLTIP_TOGGLE	Enable/disable tooltips (disabled by default)
TR-R-LIST_SHOW_ACT	Open a panel with a list of active dining reservations
TR-R-LIST_SHOW_CONF	Open a panel with a list of confirmed dining reservations
TR-R-LIST_SHOW_WAIT	Open a panel with a list of waiting list dining reservations
TR-R-LIST_SHOW_WALK	Open a panel with a list of walk-in dining reservations
TR-R-LIST_TOGDINAREA	Toggle a dining area filter in the Dining Reservation List panel.

See "POS Commands" in the LS Central Help and the corresponding Excel list with filters for a complete list of POS commands.

Demo Data

Demo Data Changes

There are changes in the demo data for items, vendors and customers, and for VAT and Posting setup. These changes were done so that the LS Central demo data is in sync with Business Central demo data.

LS Central demo items:

- VAT Product Posting group values *STANDARD*, *REDUCED*, and *ZERO* replace VAT25, VAT10, and NO VAT
- Gen. Business Posting Group value *DOMESTIC* replaces NATIONAL.

LS Central demo vendors and customers:

- VAT Business Posting Group value *DOMESTIC* replaces NATIONAL
- Gen. Business posting Group value *DOMESTIC* replaces NATIONAL.

Other setup data regarding this have been added accordingly.

Changes in Scheduled Jobs

The scheduler job *POS32-All* has been removed and replaced with two new jobs, *POS-ALL-INIT* and *POS-ALL-UPDATE*. These jobs replicate data to the POS so the POS can run offline.

Other

LS Central AppShell

LS Central AppShell, iOS version, is currently not working with LS Central 17.0, the cause for this is being investigated. The iOS version still works with older versions of LS Central .

LS Central Help

LS Central Help now appears in an updated look. The top navigation format, with the menus at the top of the screen, has been replaced by side navigation, a more functional format that has the menus on the left side of the screen with the menu tree always visible.

All previously available help functionality, such as the search function and links to various support material, older help and documents, for example, is still available on the home page.

Fixed Issues

Retail

LS Hardware Station

Connection Test

LS Hardware Station now tests the connection before every invocation and tries to reconnect, if it is not connected.

Cancel Button Not Displayed

A Cancel button is no longer displayed in the POS when a transaction is performed on an EFT device that does not support canceling.