

MSS – Extension
Functions Kalipso → MSS

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1. EXT_Article_GetDefaultUnit

Function to get the default unit of an article.

Input parameters:

inArticleCode – Code of article; inModule – MSS module to filter units table (MSUND) (P – Pre-sale / A – Auto-sale / F – Purchases / T - All)

Output parameters:

outArticleUnit - Default unit of the article, empty if no unit found and ARTUN1 is empty;

2. EXT_Article_GetImage

Function to get the full name of the main image of an article.

Input parameters:

inArticleCode - Code of article;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled, or error occurred; outImageFile – Full name of the file;

3. EXT_Article_GetPrice

Function to ask MSS to get the Price and Discounts of an article.

Input parameters:

```
inDocumentCode – Code of the document;
inCustomerCode – Customer code;
inArticleCode – Article code;
inQuantity – Quantity if there are prices and discount by quantity;
inDeliveryLocationCode – Delivery location code if price depends on this field;
inHeaderUserField1/2/3 – Header user fields if the price depends on those fields;
```

Output parameters:

```
outResultCode - Return code: 0 - Done / < 0 Error;
outPrice - Price;
outDiscount1 - Discount 1;
outDiscount2 - Discount 2;
outDiscount3 - Discount 3;
outDiscount4 - Discount 4;
outPriceCode - Price code;
outDiscount1Code - Discount 1 code;
outDiscount2Code - Discount 2 code;
outDiscount3Code - Discount 3 code;
outDiscount4Code - Discount 4 code;
outUserField1 - User field which can be used in Get Price
outUserField2 - User field which can be used in Get Price
outUserField3 - User field which can be used in Get Price
outVATIncluded - If the price calculated has VAT included or not
outVATTax - VAT Tax applied
```

4. EXT_Article_GetTotals

Function to get the totals for an article given a certain quantity, price and discounts.

Input parameters:

```
inDocumentType - Type of the document;
inCustomerCode - Code of the customer;
inArticleCode - Code of article;
inLength - Length of the article (ARTCMP);
inWidth - Width of the article (ARTLGR);
inHeight - Height of the article (ARTALT);
inWeight - Weight of the article (ARTPES);
inTotalWeight - Total weight (ARTPES * Quantity);
inQuantity - Quantity;
inQuantityFactor - Quantity factor when using alternative units;
inPrice - Price;
inDiscount1 - Discount 1;
inDiscount2 - Discount 2;
inDiscount3 - Discount 3;
inDiscount4 - Discount 4;
inLineType - Line type (N - Normal / B - Bonus / O - Offer / D - Returns);
inGlobalDiscount - Global commercial discount of the document;
inPPDiscount - Global PP discount of the document;
```

Output parameters:

outTotalDiscounts – Total value of the discounts applied; outTotalWithoutVAT – Total without VAT tax; outTotalAdditionalTaxes – Total of additional taxes; outTotalVAT – VAT total value; outTotalWithoutDiscounts – Total without discounts; outVATTax – VAT tax used in VAT canculation;

Note: Line total = outTotalWithoutVAT + outTotalVAT.

5. EXT_Article_Record

Function to ask MSS to open the article record screen.

Input parameters:

inArticleCode - Article code to show;

Output parameters:

outResultCode - Return code: 0 - Done;

6. EXT_Article_Select

Function to ask MSS to open the article selection screen.

Input parameters:

inFilterArticlesWithoutStock — To hide articles without stock from the list; inFilterCatalogArticles — To show only articles flagged as article from catalog; inFilterServiceArticles — To hide articles of type service from the list; inFilterCompetitorCode — To show only articles related to a certain competitor code

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection; outSelectedArticle - When outResultCode = 0 gets the code of the selected article; outSelectedArticleDescription - When outResultCode = 0 gets the description of the selected article;

7. EXT_Article_ValidatePriceAndDiscounts

Function to validate if inputted price and discount are valid using MSS rules.

Input parameters:

```
inDocumentType - Type of the document;
inCustomerCode - Code of the customer;
inArticleCode - Code of article;
inCurrentPrice - Price;
inCurrentDiscount1 - Discount 1;
inCurrentDiscount2 - Discount 2;
inCurrentDiscount3 - Discount 3;
inCurrentDiscount4 - Discount 4;
inOriginalPrice - Price;
inOriginalDiscount1 - Discount 1;
inOriginalDiscount2 - Discount 2;
inOriginalDiscount3 - Discount 3;
inOriginalDiscount4 - Discount 4;
inLineType - Line type (N - Normal / B - Bonus / O - Offer / D - Returns);
```

Output parameters:

outResultCode - Return code:

1: OK

0: Error

- -1 Error in field price
- -2 Error in field discount 1
- -3 Error in field discount 2
- -4 Error in field discount 3
- -5 Error in field discount 4

Note: The error message is shown inside the process, the different returns codes serve to, for example, set the focus in the correct field.

8. EXT_Customer_Record

Function to ask MSS to open MSS customer record screen.

Input parameters:

inCustomerCode - Customer code to show;

Output parameters:

outResultCode - Return code: 0 - Done;

9. EXT_Customer_Select

Function to ask MSS to open the customer selection screen.

Input parameters:

inRouteCode – Code of the selected route to filter when Customer from route is active; inSubRouteCode – Code of the selected sub route to filter when Customer from route is active;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection; outSelectedCustomer – When outResultCode = 0 gets the code of the selected customer; outSelectedCustomerName – When outResultCode = 0 gets the name of the selected customer;

10. EXT_Deposit_Cancel

Function to ask MSS to cancel a bank deposit.

Input parameters:

inDepositExercise - Exercise of the deposit; inDepositSeries - Series of the deposit; inDepositNumber - Number of the deposit;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

11. EXT_Deposits_OpenModule

Function to ask MSS to open the Deposits screen.

Input parameters:

n/a

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

12. EXT_Document_Cancel

Function to ask MSS to cancel a document.

Input parameters:

inDocumentExercise – Exercise of the document; inDocumentType – Type of the document; inDocumentSeries – Series of the document; inDocumentNumber – Number of the document;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

13. EXT_Document_AddLine

Function to add a new line to MSS document.

Input parameters:

```
inLineType - Type of the line;
inArticleCode - Article code;
inQuantity - Quantity;
inUnit - Unit (empty to MSS calculate default unit);
inPrice - Price (zero do MSS calculate default price and discounts);
inDiscount1 - Discount 1;
inDiscount2 - Discount 2;
inDiscount3 - Discount 3;
inDiscount4 - Discount 4;
inPriceCode - Price code;
inDiscount1Code - Discount 1 code;
inDiscount2Code - Discount 2 code;
inDiscount3Code - Discount 3 code;
inDiscount4Code - Discount 4 code;
inUnitWeight - Unit weight - DCPPES;
inTotalWeight - Total weight (must be already calculated) - DCLPET;
```

```
inLength – Length – DCLCMP;
inHeight – Height – DCLALT;
inWidth – Width – DCLLGR;
inObservations – Observations;
inReturnTypeCode – Code to identify the type of return (used when inLineType = D);
inIgnoreLots_SerialNumbers – Ignore Lots or Serial Numbers (1 – MSS will not launch lots or serial numbers selection);
inIgnoreComponents – Ignore Components (1 – MSS will not add components lines automatically);
inIgnoreBonusQuantities – Ignore Bonus quantities (1 – MSS will not add bonus lines automatically);
```

Output parameters:

outResultCode – Return code: 0 – Done / < 0 Error occurred; outLineNumber – Number of the line added;

14. EXT_Document_DeleteLine

Function to Delete a document line.

Input parameters:

inDocumentLine - Line to be deleted;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 Error occurred;

15. EXT_Document_EditLine

Function to Edit a document line.

Input parameters:

inDocumentLine - Line to be edited;

inNewQuantity – New quantity of the line (zero to open normal MSS quantity screen);

inNewUnit - If inNewQuantity > 0 and not empty will change line to this unit;

inIgnoreLots_SerialNumbers - Ignore Lots or Serial Numbers (1 - MSS will not launch lots or serial numbers selection);

inIgnoreComponents – Ignore Components (1 – MSS will not add components lines automatically);

inIgnoreBonusQuantities – Ignore Bonus quantities (1 – MSS will not add bonus lines automatically);

Output parameters:

outResultCode - Return code: 0 - Done / < 0 Error occurred;

16. EXT_Document_Finalize

Function to ask MSS to create a new document based on a temporary one applying all the rules related to it. **Note:** The temporary document is not deleted after the creation of the new document;

Input parameters:

inDocumentExercise - Exercise of the temporary document;

inDocumentType - Type of the temporary document;

inDocumentSeries - Series of the temporary document;

inDocumentNumber - Number of the temporary document;

inTargetDocumentType - Type of the new document;

inReloadCustomerData – To ask MSS to load all the customer information, the temporary document must have the customer code with a correct customer code;

inReloadPricesAndDiscounts - To ask MSS to reload Price and Discounts of the articles from all the lines;

inSaveAutomatically - To save the document automatically, if False will show the MSS screen;

inPrint – To print the document, only applied when inSaveAutomatically = TRUE;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred; outDocumentExercise – Exercise of the new document; outDocumentType – Type of the new document; outDocumentSeries – Series of the new document; outDocumentNumber – Number of the document;

17. EXT_Document_Recalculate

Function to recalculate the entire document (this process runs over the temporary MSS tables DCC_Temp, DCL_Temp).

Input parameters:

inDocumentExercise – Exercise of the document; inDocumentType – Type of the document; inDocumentSeries – Series of the document; inDocumentNumber – Number of the document;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

18. EXT_Documents_OpenModule

Function to ask MSS to open the Documents screen.

Input parameters:

inCustomerCode - Customer code to select automatically;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

19. EXT_GMAPS_LoadMap

Function to ask MSS to open the Documents screen.

Input parameters:

inMyLocation_Latitude – Current position Latitude;
inMyLocation_Longitude – Current position Longitude;
inShowPoint – Show specific point: 1 – Yes / 0 – No;
inPoint_Latitude – Specific point Latitude;
inPoint_Longitude – Specific point Longitude;
inCanChangePointLocation – If user can change specific point location by clicking on map: 1 – Yes / 0 – No;
inZoom – Zoom value (when showing multiple points, the zoom is calculated to show all points);
inPointsList_Latitude – Latitude of multiple points (values separated by ASCII 7);
inPointsList_Longitude – Longitude of multiple points (values separated by ASCII 7);
inPointsList_Title – Titles of multiple points (values separated by ASCII 7);
inPointsList_Icon – Icons of multiple points (values separated by ASCII 7);
inPointsShowLabels – Show labels with titles of each point: 1 – Yes / 0 – No;
inPointsList_GooglePlacesID – Google places ID of multiple points (values separated by ASCII 7 - Optional);

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred; outMapFileName – Full path of the file to load in the HTML Viewer;

Note: Google maps api key is required and is loaded directly in the function.

20. EXT_GPS_Connect

Function to active the GPS device to get coordinates.

Input parameters:

n/a

Output parameters:

outResultCode – Return code: 1 – Gps is active / 0 – GPS activation failed; outErrorMessage – Error message if any error occurred in the activation;

21. EXT_GPS_GetAddressFromLatLong

Function to get the full address based on a longitude and latitude.

Note: Uses Google Maps Places API which needs a user Key. Check MSS documentation on Google Maps Places API or contact support department.

Input parameters:

inLongitude – Longitude of the place; inLatitude – Latitude of the place; inKey – Google Maps Places API key;

Output parameters:

outAdministrative_Area_Level – in Portuguese addresses refers to the district of the place; outRoute_Street_Number – Address of the place; outLocality_Administrative_Area – City of the place; outPostal_Code – Postal code of the place; outCountry – Country code of the place; outCountry_Description – Country description of the place;

22. EXT_GPS_GetCoordinates

Function to get the coordinates of the current location.

Input parameters:

inTimeout - Timeout in seconds to wait for the coordinates;

Output parameters:

outResultCode – Return code: 1 – Coordinates obtained / 0 – Error getting coordinates; outErrorMessage – Error message if any error occurred getting the coordinates; outLongitude – Longitude of the current place; outLatitude – Latitude of the current place; outAltitude – Altitude of the current place;

23. EXT_GPS_GetCoordinatesFromAddress

Function to get the coordinates of a place based on its full address.

Note: Uses Google Maps Places API which needs a user Key. Check MSS documentation on Google Maps Places API or contact support department.

Input parameters:

inAddress – Full address of the place; inKey – Google Maps Places API key;

Output parameters:

outFormated_Address – Full address formatted;
outLatitude – Latitude of the place;
outLongitude – Longitude of the place;
outTypes – Type of place (restaurant, bank, ... check google maps places api documentation to full list of types);
outPlace_ID – Place ID of the place(internal ID of the place from google places api, is used the get additional information);

24. EXT_Lots_OpenSeletion

Function to ask MSS to open the Lots selection screen. The lots selected will be saved in DCT_Temp table with the number of line passed to the function

Input parameters:

```
inModule - Module from which the function is called: 0 - Documents / 1 - Services / 2 - Deliveries;
inMode – List lots or serial numbers: 1 – Lots / 2 – Serial numbers;
inOperation – Which operation is being done: 1 – New record / 2 – Modifying / 3 – Consulting;
inArticleCode - Article code;
inArticleDescription - Article description;
inDocumentType - Document type of the current document;
inDocumentLine - Number of the line of the document;
inQuantity - Quantity selected of the article;
inLineType - Type of line (DCLTPL);
inDeliveryOriginDocumentExercise - Exercise of the delivery document (only used when inModule = 2);
inDeliveryOriginDocumentSerie - Serie of the delivery document (only used when inModule = 2);
inDeliveryOriginDocumentNumber - Number of the delivery document (only used when inModule = 2);
inDeliveryDestinyDocumentType - Document to be generated with the delivery information (only used when inModule = 2);
inServicesExercise - Exercise of the service (only used when inModule = 1);
inServicesSerie - Serie of the service (only used when inModule = 1);
inServicesNumber - Number of the service (only used when inModule = 1);
inServicesEquipmentLine - Line of the equipment of the service (only used when inModule = 1);
```

Output parameters:

N/a

25. EXT_MSS_GetCurrentVersion

Function to ask MSS to return MSS Current Version information.

Input parameters:

n/a

Output parameters:

outMSSVersion – Version of MSS installed (for example 5.0.0 2019-05-07 (S) \rightarrow S – Smartphone / T – Tablet / P – PDA);

26. EXT_Numerators_GetNextNumber

Function to ask MSS to return the next number available for a document type.

Input parameters:

inDocumentType - Type of document;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred; outDocumentExercise – Exercise to assign the new document; outDocumentSeries – Series of the new document; outDocumentNumber – Next number available;

27. EXT_Numerators_SetNewNumber

Function to ask MSS to return the next number available for a document type.

Input parameters:

inDocumentType - Type of document; inNewNumber - New numerator of the document;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred;

28. EXT_Orders_OpenModule

Function to ask MSS to open the Orders screen to create a new order.

Input parameters:

inDocumentType – Type of document to select automatically; inCustomerCode – Customer code to select automatically; inSaveAndClose – Close the windows after save;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred; outDocumentExercise – Exercise of the new document; outDocumentType – Type of the new document; outDocumentSeries – Series of the new document; outDocumentNumber – Number of the document;

Note: If inSaveAndClose <> 1 the value of outResultcode will be always 0 and Exercise, Type, Series and Number will be empty.

29. EXT_Print_Document

Function to ask MSS to print a document.

Input parameters:

inDocumentExercise - Exercise of the document;

inDocumentType - Type of the document;

inDocumentSeries – Series of the document;

inDocumentNumber - Number of the document;

inPrintPDF - To create only a PDF file (the document rules are applied);

inPrintSecondLayout - To print the secondary layout if the document is configured to do it;

inDontOpenPDF – When printing to PDF, MSS automatically asks if the user wants to open it;

inParameter1 - User parameter 1

inParameter2 - User parameter 2

inParameter3 - User parameter 3

inParameter4 - User parameter 4

inParameter5 - User parameter 5

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

30. EXT_Print_Report

Function to ask MSS to print a report.

Input parameters:

inReportFileName - Name of the report file to print;

inParameter1 - User parameter 1

inParameter2 – User parameter 2

inParameter3 - User parameter 3

inParameter4 - User parameter 4

inParameter5 – User parameter 5

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

31. EXT_Prospect_Record

Function to ask MSS to open MSS prospect record screen.

Input parameters:

inProspectCode - Prospect code to show;

Output parameters:

outResultCode - Return code: 0 - Done;

32. EXT_Prospect_Select

Function to ask MSS to open the prospect selection screen.

Input parameters:

inRouteCode – Code of the selected route to filter when Prospect from route is active; inSubRouteCode – Code of the selected sub route to filter when Prospect from route is active;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection; outSelectedProspect - When outResultCode = 0 gets the code of the selected prospect; outSelectedProspectName - When outResultCode = 0 gets the name of the selected prospect;

33. EXT_Receipts_Cancel

Function to ask MSS to cancel a receipt.

Input parameters:

inDocumentExercise – Exercise of the receipt; inDocumentType – Type of the receipt; inDocumentSeries – Series of the receipt; inDocumentNumber – Number of the receipt;

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled selection or error occurred;

34. EXT_Receipts_OpenModule

Function to ask MSS to open the Receipts screen to create a new receipt.

Input parameters:

inDocumentType – Type of receipt to select automatically; inCustomerCode – Customer code to select automatically; inSaveAndClose – Close the windows after save;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred; outDocumentExercise – Exercise of the new receipt; outDocumentType – Type of the new receipt; outDocumentSeries – Series of the new receipt; outDocumentNumber – Number of the receipt;

Note: If inSaveAndClose <> 1 the value of outResultcode will be always 0 and Exercise, Type, Series and Number will be empty.

35. EXT_Resources_OpenWindow

Function to open MSS resources window.

Input parameters:

inTitle – Main title of the window; inSubTitle – Sub title of the window (only used on Smartphone, small label below main title); inImagesList – List of Image files separated by ";"; inResourcesList – List of additional resources separated by ";";

Output parameters:

n/a

36. EXT_Sales_OpenModule

Function to ask MSS to open the Sales screen to create a new sale.

Input parameters:

inDocumentType – Type of document to select automatically; inCustomerCode – Customer code to select automatically; inSaveAndClose – Close the windows after save;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred; outDocumentExercise – Exercise of the new document; outDocumentType – Type of the new document; outDocumentSeries – Series of the new document; outDocumentNumber – Number of the document;

Note: If inSaveAndClose <> 1 the value of outResultcode will be always 0 and Exercise, Type, Series and Number will be empty.

37. EXT_Service_Cancel

Function to ask MSS to cancel a service.

Input parameters:

inServiceExercise – Exercise of the service; inServiceSeries – Series of the service; inServiceNumber – Number of the service;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled selection or error occurred;

38. EXT_Synchronize_OpenModule

Function to open MSS synchronization window.

Input parameters:

inDefaultProfile – Profile to be select when window opens; inStartAutomaticaly – To execute automatically the synchronization process;

Output parameters:

n/a

39. EXT_TransportDocument_OpenModule

Function to ask MSS to open transport document module.

Input parameters:

n/a

Output parameters:

outResultCode - Return code: 0 - Done / < 0 User canceled, or error occurred;

40. EXT_User_GetCurrentUserInfo

Function to get the current user name, type and salesman code.

Input parameters:

n/a

Output parameters:

outLoginUser – Username of the current user; outLoginName – Name of the current user; outLoginType – Type of the user: U – User / A – Administrator (USRTIT); outLoginSalesmanCode – Salesman code of the current user;

41. EXT_EndOfDay_OpenModule

Function to execute the End of Day procedure from MSS.

Input parameters:

n/a

Output parameters:

n/a

42. EXT_Log_SaveLog

Function to save information on MSS Logs tables, LOGTYP = 1000.

Input parameters:

inLogMessage - Log message;

inLogDetails - Log details;

inLogReferenceInformation - Log refence information (used in MSS to save the lines of a document, for example);

inLogStatus - Status: 1 - Information(default value if empty) / 2 - Error;

inLogParent - Stamp of the parent registry. Used to group logs;

inLogDocumentExercise – Document exercise, if the log message is referred to a document;

inLogDocumentType - Document type, if the log message is referred to a document;

inLogDocumentSeries - Document series, if the log message is referred to a document;

inLogDocumentNumber - Document number, if the log message is referred to a document;

inLogDocumentLine - Document line, if the log message is referred to a document;

inLogAdditionalInformation1 - Additional information;

inLogAdditionalInformation2 - Additional information;

inLogAdditionalInformation3 - Additional information;

inLogAdditionalInformation4 - Additional information;

inLogAdditionalInformation5 - Additional information;

Output parameters:

outResultCode – Return code: 0 – Done / < 0 User canceled, or error occurred; outLogStamp – Stamp of the saved log;