

# What's new in CU 12 for Microsoft Dynamics AX 2012 R3

This document describes the new or changed functionality, and regulatory updates, that were included in cumulative update (CU) 12.

White paper

November 2016

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# What's new in CU 12 for Microsoft Dynamics AX 2012 R3

This document lists the changes to functionality that have been included for Microsoft Dynamics AX 2012 R3 in cumulative update (CU) 12. Most of these changes were made in the Warehouse management, Transportation management, and Retail areas of the product. In addition, several regulatory features have been included in CU <https://mbs.microsoft.com/customersource/northamerica/AX/downloads/product-releases/msdax2012r3cu10whatsnew12>. Those features are also listed and briefly described.

## Compatibility notice

| Compatibility announcements   | Notes   |
|---|---|
| Microsoft SQL Server 2016 Standard Edition, and Enterprise Edition are supported with AX 2012 R3 CU 12. | Master Data Management (MDM) is currently supported with SQL Server 2016. |
| Microsoft Office 2016 is now supported with AX 2012 R3 CU 12.   |   |

## Machine learning integration to AX 2012 R3

The following enhancements enable integration between Microsoft Cognitive services and Dynamics AX.

A new module, Cortana Intelligence services management, allows you to integrate to the Microsoft Cognitive services – Recommendations API right from within Dynamics AX without have to learn data science or big data technologies. You can use this module to complete the following tasks.

- Connect to your Cognitive services account from within AX
- Upload data to the recommendations API
- Trigger machine learning model creation
- Manage machine learning models and builds

The new module includes the following capabilities.

Data management – The data management capability enables you to complete the following tasks.

- Use two new published DIXF data entities as part of this capability to send data to model
- Create your own entities
- Upload data manually
- Check history and status of all data jobs

Model management – The model management capability enables you to complete the following tasks.

- Create ML model from within AX
- Synchronize models between recommendations API service and local AX instance

Build management – The build management capability enables you to complete the following tasks.

- Trigger build creation for any ML model
- Change default build parameters
- Set active builds
- View existing builds per model
- Automate build creation Data entities

Data entities – The following new data entities have been published as part of this integration.

- DMFRetailProductCategoryEntity
- DMFRetailProductTransactionEntity

For more information and to optimize your use of this new module, refer to the Using machine learning based Microsoft Cognitive services with AX 2012 R3 white paper, which is available here

<https://go.microsoft.com/fwlink/?linkid=835925>.

## Developer tools enhancements

The following enhancements were added to developer tools.

| Description of issue or change request   | Description of enhancement  |
|--|---|
| The Data Import/Export Framework (DIXF) encounters random load failures that are related to multi-threading.<br>KB 3175362                           | This update includes support for multi-threading by running threads where records are grouped by specific fields. |
| By default, the Free text invoice entity is not available in the list of available entities.<br>KB 3175362   | This hotfix adds the Free text invoice entity to the list of available entities.                                  |
| The Product receipt entity under DIXF does not allow entries in critical data fields, such as <b>Item number</b> and <b>Quantity</b> .<br>KB 3178827 | The changes in this hotfix will now do partial postings, based on the data that is provided in the file.          |
| MDM support for SQL Server 2016<br>KB 3199177  | This hotfix includes support for Microsoft SQL Server Master Data Services 2016.                                  |

# BI enhancements

The following enhancements were added to business intelligence (BI) and reporting functionality.

| Description of issue or change request   | Description of enhancement   |
|--|--|
| Support was added for printing reports in HTML5 file format. (This functionality requires Microsoft SQL Server Reporting Services 2016.)<br>KB 3193982 | The changes in this hotfix include support for printing reports in HTML5 format. This functionality was introduced in Reporting Services 2016. This hotfix adds a new HTML5 file output option, which is available only if the Reporting Services version supports it. |

# Financial enhancements

The following enhancements were added to Financial functionality.

| Description of issue or change request  | Description of enhancement   |
|---|--|
| A design change that was introduced for the Invoice approval journal in CU 11 causes issues during tracing of registered invoices.<br>KB 3199207            | To address the lack of visibility of the Invoice register voucher, after the invoice is approved, an additional column that is labeled <b>Registered voucher</b> is added to the <b>Vendor transactions</b> form. This column appears after the <b>Voucher</b> column. Data is entered in it when <b>Ledger voucher changed</b> exists for the voucher.<br>This change is applicable only when KB 3097024 is loaded. |
| <b>Vendor Invoice</b> does not appear on the <b>Pending invoice</b> list page if you lose your connection to Application Object Server (AOS).<br>KB 3194624 | All pending invoices now are included on the list page, regardless of their save status.   |
| Users should be able to recover a pending invoice that another user created when that user's session is no longer active.<br>KB 3179171                     | This hotfix adds the ability to recover invoices that were put in the active state by users who are no longer signed in.   |

| Description of issue or change request   | Description of enhancement   |
|--|--|
| <p>Sales order and purchase order payment schedules are not honored if they are edited manually and then partial invoicing is tried.</p> <p>KB 3135629</p> | <p>Three issues come into play in this circumstance:</p> <ul style="list-style-type: none"> <li>When the <b>Payment schedule</b> form is opened from a purchase order or sales order, a new check box, named <b>Copy precisely to invoice</b> is now available on the <b>Payment schedule</b> tab. When this check box is selected, the payment schedule is copied from the order to the invoice when the invoice is posted, or when the <b>Payment schedule</b> form is opened from the invoice. When this check box is selected, partial invoicing of sales and purchase orders can be done only if the payment schedule is recalculated on the invoice by opening the <b>Payment schedule</b> form and clicking <b>Calculate</b>.</li> </ul> <p>If this check box is cleared, the payment schedule will be calculated at posting, or if the <b>Payment schedule</b> form is opened from the invoice.</p> <ul style="list-style-type: none"> <li>The payment schedule is calculated only when the form is first opened. If the payment schedule must be recalculated after the <b>Payment schedule</b> form has been opened for the first time, the <b>Calculate</b> button on the <b>Payment schedule</b> form must be used.</li> <li>When the <b>Payment schedule</b> form is closed, the payment schedule totals are compared with the totals on the originating document.</li> </ul> |
| <p>Support for automated depreciation runs across legal entities</p> <p>KB 3177744</p>   | <p>Additional functionality is added to the <b>Create fixed asset proposals</b> periodic process. A new field that is named <b>Legal entities</b> lets users select which legal entities to include in the depreciation run.</p> <p>In addition, an option was added to post journals after they are created through the proposal.</p> <p>Finally, the <b>Select</b> query was modified to show information from all involved legal entities that are included. The depreciation proposal is then sent to a batch process that both creates the depreciation journals and posts the transactions.</p> <p>A new periodic process, <b>Create depreciation book proposals</b>, was added to mirror this functionality by using depreciation books.</p> <p>To use this process, in the <b>Fixed asset parameters</b> form for each legal entity, set up the journal names to use for the depreciation proposal. The legal entity will then be available for selection in the <b>Depreciation proposal</b> form.</p>  |

| Description of issue or change request           | Description of enhancement   |
|--|--|
| Tax reconciliation data preview<br>KB 3185529    | <p>A new view at <b>General ledger &gt; Reports &gt; Reconciliation &gt; Sales tax</b> shows the data that the report uses. This view provides data that can be copied to Microsoft Excel for further analysis on specific vouchers, tax codes, main accounts, or other criteria. You can set the same parameters that are set on the report. Click the <b>Run Data Provider</b> button to enter the report's raw data in the grid. The data can be marked and copied and pasted into Excel, or it can be automatically added by using the <b>Export to Excel</b> command on the <b>File</b> menu.</p> <p>This view is intended as an internal tool to help analyze small numbers of transactions. Not all capabilities that are available in standard Microsoft Dynamics AX forms are enabled in this view.</p> |
| 1099 changes for 2016 – AX 2012 R3<br>KB 3199354 | This fix contains changes to the 1099 code to reflect updated Internal Revenue Service (IRS) formats.  |

## Retail enhancements

The following enhancements were added to Retail functionality.

| Description of issue or change request  | Description of enhancement  |
|---|---|
| Modern Point of Sale (MPOS) does not let users refund shipping charges when customer orders are returned.<br>KB 3164446 | This hotfix lets retailers refund shipping charges to customers for returned items that were originally sold through a customer order transaction and then shipped to the customer. |
| Include tax on a gift card item number.<br>KB 3183056   | This hotfix adds support for specifying sales tax when gift cards are issued.   |
| Add the customer name to the recall transaction page.<br>KB 3174010   | This fix adds support for showing the customer name that is included on a suspended transaction.  |
| There is no register property that lets cashiers leave the cash drawer open when they close a shift.<br>KB 3171503      | The changes in this hotfix help guarantee that a cash drawer can be left open at the end of the day, or between cashier shifts, to show that the register is empty.                 |

| Description of issue or change request  | Description of enhancement  |
|---|---|
| <p>Include the <b>Item ID</b> field in the transaction grid for the MPOS layout designer.</p> <p>KB 3167455</p>                                 | <p>This hotfix makes the <b>Item ID</b> field available in the layout designer.</p>   |
| <p>Lack of financial dimensions on intercompany gift card posting.</p> <p>KB 3182029</p>  | <p>You now specify financial dimensions when intercompany transactions in General ledger are posted for gift cards.</p>   |
| <p>Notify cashiers that a safe drop is required, based on an amount.</p> <p>KB 3187584</p>  | <p>Cashiers will now be notified if the amount of money in their cash drawer has exceeded its limit.</p>  |
| <p>Tender declarations should not prevent 0 (zero) amounts.</p> <p>KB 3055226</p>   | <p>Tender declarations now allow for 0 (zero) and negative amounts.</p>   |
| <p>Performance of the pricing engine is improved when discounts are evaluated.</p> <p>KB 3177134</p>  | <p>This hotfix enhanced and optimized the evaluation of multiple concurrent discounts.</p>  |
| <p>MPOS tender declarations that use specific card types, such as MasterCard or Visa, should be reflected during posting.</p> <p>KB 3185294</p> | <p>The changes in this hotfix now show one credit card entry for each credit card that is defined for the channel.</p>  |
| <p>MPOS does not recall or complete a customer order when the order was created in offline mode (functionality profile).</p> <p>KB 3190486</p>  | <p>This hotfix adds functionality that enables customer orders and quotations to be saved when the MPOS system is offline, and then retrieved and submitted when the system is back online.</p> |
| <p>Let cashiers retry failed retail server calls after a credit card has been processed.</p> <p>KB 3199745</p>                                  | <p>Cashiers can retry a call to the Retail Server if the connection to the server was lost. This change reduces the need to void and reprocess credit card transactions.</p>                    |



# Human capital management enhancements

The following enhancements were added to Human capital management functionality.

| Description of issue or change request   | Description of enhancement   |
|--|--|
| <p>Schema changes that are required for Affordable Care Act (ACA) e-filing in AX 2012 R3</p> <p>KB 3174426</p>   | <p>The schema that is used to file ACA reports electronically has been updated so that it remains current with the act's guidelines.</p>   |
| <p>A message was added to clarify the available options when users try to select <b>Allow dependent coverage</b> without ending a benefit and setting it up again.</p> <p>KB 3173610</p> | <p>A warning message has been added to clarify the changes that you can make to benefits. When you try to select the <b>Allow dependent coverage</b> option without ending a benefit and setting it up again, you receive the following warning message: "You cannot change this option because it is associated with one or more plans. Remove the association with the plan, and then change this option."</p> |
| <p>Tax lines do not appear in the Tax transaction history detail as 0 (zero) wages or tax, even when 0 is the correct calculation.</p> <p>KB 3187561</p>                                 | <p>The application filtered out all tax transaction lines that have 0 (zero) wages and tax.</p>  |

# Supply chain management enhancements

The following enhancements were added to Supply chain management and Warehouse and transportation management functionality.

| Description of issue or change request   | Description of enhancement   |
|--|--|
| <p>Recalculation of bill of materials (BOM) levels does not correct BOM levels for raw materials in some production or batch order scenarios. Therefore, issues occur when the BOM is exploded in Materials Resource Planning (MRP).</p> <p>KB 3178134</p> | <p>Planning BOM levels are now calculated in separate threads.</p> |

| Description of issue or change request   | Description of enhancement  |
|--|---|
| <p>Make sure that planned orders are not created before the master planning run date.<br/>KB 3178979</p>                             | <p>To prevent planned orders from being scheduled in the past, regardless of how MRP is set up in terms of futures messages, select the <b>Ensure that planned orders are not created prior to master planning run date</b> check box on the master plan that you are running.</p> <p>For example, to produce a finished item, you require material that you do not have on hand. The material has a lead time of 10 days, and production of the finished item takes one day. You receive an order that requires the finished item five days from the current date. You run MRP on the current date without setting up futures, but you select the <b>Ensure that planned orders are not created prior to master planning run date</b> check box on the plan. In this case, the planned purchase order that you get for the material has an order date and start date on the current date, and a delivery date that is 10 days from the current date. The planned order for the finished item will have an order date that is four days from the current date. Therefore, the finished item can be delivered five days from the current date.</p> |
| <p>Safety stock pegs inventory to itself. Therefore, other demand types are delayed.<br/>KB 3190607</p>                              | <p>This hotfix causes safety stock to be the last type of demand that is fulfilled during a master planning regeneration. Note that this fix applies only to regeneration.</p>  |
| <p>The slow performance of BOM level calculation causes delays in MRP and firming.<br/>KB 3192966</p>                                | <p>The processing of BOM level calculations is improved in this hotfix.</p>   |
| <p>The issue margin is not considered for capable-to-promise (CTP) delivery date control when the item is on hand<br/>KB 3174511</p> | <p>When planned supply is pegged to on-hand inventory, the issue margin is not considered when ship dates are calculated. We have modified the behavior so that the issue margin is considered in the calculation of ship dates whenever explosion is run, even during CTP calculation.</p>   |
| <p>Changes to the delivery date on a planned purchase order do not affect the PO line after firming.<br/>KB 3200229</p>              | <p>Sometimes, users must override the expected delivery date on the planned order. However, PO line initialization then reverts to the lead time calculations.</p> <p>This hotfix changes the behavior so that the <b>ReqPO dates</b> values are preserved on the firmed order line.</p>  |

| Description of issue or change request  | Description of enhancement  |
|---|---|
| <p>Users cannot search for purchase agreements when they create direct-delivery purchase orders from the <b>Direct delivery</b> form.</p> <p>KB 3200591</p>   | <p>A new option that is <b>Search for purchase agreement</b> is added to the <b>Dropship workbench</b> form. When this option is selected, the system looks for existing purchase agreements when purchase orders are created for the direct delivery.</p>  |
| <p>Enable backflushing of unreserved batch-enabled raw materials in the first expired, first out (FEFO) sequence.</p> <p>KB 3176176</p>   | <p>You can now backflush material that is not reserved from the production input location, provided that the product backflushing is set to FEFO. The backflushing is not applied to batch above item.</p>  |
| <p>Performance issue for sales order processing</p> <p>KB 3163813</p>   | <p>Changes to packing slip processing improve the posting performance of packing slips for sales orders.</p>  |
| <p>Users can specify a non-approved vendor when they use the <b>Add an item</b> option on the <b>EP Order Products</b> site.</p> <p>KB 3179607</p>  | <p>Validation logic is added to make sure that only available vendors appear in the lookup. The behavior resembles the behavior for purchase requisitions in the rich client.</p>   |
| <p>Users must be able to create policies that skip work creation for finished goods, put-away, and raw materials picking for specific locations and products.</p> <p>KB 3184505</p>   | <p>A new work policy prevents the creation of work for raw material picking and put-away of finished goods for a set of products at specific locations.</p>   |
| <p>The <b>Display inventory status</b> check box must be added to the <b>Adjustment in</b>, <b>Adjustment out</b>, and <b>Movement</b> work creation menu items in Warehouse management demand planning (WMDP).</p> <p>KB 3198659</p> | <p>This hotfix adds support for showing inventory status during the creation of movement work in WMDP.</p>  |
| <p>Cancel work from the radio frequency (RF) gun.</p> <p>KB 3198317</p>   | <p>Work can now be canceled by using an RF gun. A new menu item is added for canceling work by using an RF gun. The setup also supports canceling work that has associated replenishment work. That functionality is controlled on the menu item itself.</p>  |
| <p>From the load planning workbench, reverse ship confirmations for all loads, cancel packing slip updates for sales orders, and cancel product receipts for purchase orders.</p> <p>KB 3196554</p>                                   | <p>You can now reverse loads when the shipment is confirmed and therefore enabled. Therefore, you can change loads up until the actual shipment. You can also cancel packing slip updates for sales orders and product receipts for purchase orders. Therefore, you can reverse loads even after these updates have been completed.</p> |

| Description of issue or change request   | Description of enhancement  |
|--|---|
| <p>Create a Vendor invoice journal for transfer orders when freight is reconciled in Transportation management system (TMS).<br/>KB 3195956</p>  | <p>You can now create an invoice journal for a transfer order when freight is reconciled in TMS.</p>  |
| <p>Merge two license plates (LPs) that are both tied to existing work in stage, and that both have simple WHS items on them.<br/>KB 3190562</p>  | <p>You can now consolidate the content of different LPs into one LP. The work that is associated with the LPs will be merged. One work item will remain (the first LP that has work), and the other work items from the consolidated LPs will be completed. The consolidated work items must have the same load and the same shipment address. The same preconditions that are used for consolidation shipments apply. The LPs must be at the same location. You can start the consolidation by scanning either an LP that has content or an empty LP.</p>  |
| <p>Manually move inventory after work has been created.<br/>KB 3192548</p>   | <p>Warehouse workers can now move inventory from a mobile device, even if work has been created against part or all of the quantity that must be moved. This change adds flexibility to the operation by letting you move pallets that are filling up on the inbound dock to an inbound buffer location. Put-away work can then be started from that inbound buffer location. Similarly, you can clear a location at a pick face where some of the inventory is reserved against sales picking work. This work updates the location where inventory should be taken from as soon as the ad-hoc manual movement is registered.</p> |
| <p>The <b>On-hand</b> form must have <b>Available physical</b> information on the summary of exact dimensions.<br/>KB 3185433</p>  | <p>An additional column is added to show the available physical inventory on the exact dimensions that are shown.<br/><br/>If some dimensions in the reservation hierarchy seem to be missing, a warning icon appears as a notification that the value in the new field cannot be calculated.</p>   |
| <p>If less than the full work quantity of a batch is picked, picking work becomes stuck, because the quantity is not valid. Users should be able to select a different unit of measure.<br/>KB 3196872</p> | <p>This hotfix resolves the issue by letting users select a different unit of measure when they confirm the quantity.</p>   |
| <p>Users must be able to create work exceptions during LP receiving.<br/>KB 3173151</p>  | <p>This hotfix lets you create work exceptions with LP receiving.</p>   |

# Service Industries enhancements

The following enhancements were added to Service industries functionality.

| Description of issue or change request                                      | Description of enhancement  |
|---|---|
| It takes a long time to open projects from Microsoft Project.<br>KB 3181556 | This hotfix improves performance when users open Microsoft Dynamics AX projects from Microsoft Project. |

# Public sector enhancements

The following enhancements were added to Public sector functionality.

| Description of issue or change request  | Description of enhancement   |
|---|--|
| The <b>Budget control account detail history</b> report does not show correct values in the pre-encumbrance column.<br>KB 3190244   | The <b>Budget control account detail history</b> report now shows correct values in the pre-encumbrance column.  |
| Create corresponding budget register entries to reduce carry-forward budget, based on the reservation type or the fund setup, if the parameter to reduce the carry-forward budget is enabled.<br>KB 3185485 | This hotfix adds functionality that generates a reduction to the carry-forward budget when a general budget reservation line is reduced, if the <b>Budget reservation type or fund</b> setting is marked and the <b>Reduce carry forward budget</b> parameter enabled. |

# Country/region-specific updates that are included in CU 12

The following enhancements and regulatory changes apply to specific countries and regions.

| Description of issue or change request  | Description of enhancement   |
|---|--|
| IN_CDRCR_Excise duty on transfers of goods from an excisable location to a non-excisable location<br>KB 3182878 | This hotfix resolves the issue of excise duty on transfers of goods. |
| Performance issue with the French balance report<br>KB 3186280  | This hotfix improves processing of the report.                       |

| Description of issue or change request  | Description of enhancement                                |
|---|---|
| NF-e: Correction letters are rejected with error: 594 – Rejection: The sequence number of the event is greater than expected.<br>KB 3181983 | This hotfix lets you delete a rejected correction letter. |

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