Microsoft Dynamics 365 for Operations

What’s new?
Microsoft Dynamics 365 for Operations is Microsoft’s business application for enterprises that enables people to make smarter decisions quickly through an intelligent user interface that provides access to real-time insights and intelligence. It enables business to transform by delivering proven business logic and enabling them to redesign their business processes faster so they can innovate, get quick time to value to stay ahead of the competition. It gives businesses the flexibility to grow at their pace and do business nearly anywhere, anytime, through the choice and flexibility of the cloud, allowing them to scale their operations globally to meet business needs.

What’s new in Microsoft Dynamics 365 for Operations?

Transforming business by easily redesigning processes is crucial for organizations to stay competitive. It’s a way for them to challenge the status quo, but they need to do it quickly in a predictive way and without business disruption. We are enabling businesses to transform by simplifying and speeding up their ability to redesign business processes. With Dynamics 365 for Operations they will get faster time to value from their technology that continuously evolves and grows with them to improve business planning and execution with predictable implementations – getting them up and running faster. And when they want to customize processes, support for technologies like Visual Studio gives them a large pool of talent, resources and solutions to meet their specific business needs.

Helping organizations grow at their pace is all about giving them the choice and flexibility to do business anytime, anywhere. We are giving businesses the ability to leverage the power of the cloud to scale their operations globally, and a solution that easily integrates with their legacy systems and data so they can continue to benefit from their existing investments and removing any barriers to growth. It is also about giving them the peace of mind that their information will be secure and compliant in a trusted cloud from Microsoft.

We’re enabling people to make smarter decisions quicker so they are ready for anything and can make dreams a reality. We are empowering people by delivering tools built for the modern workplace - business solutions that are intelligent, mobile, familiar, easy to use and foster collaboration so people can be more productive, faster. And with real-time views into business operations they can make better data-driven decisions to have a positive impact on their business.
What's new?
Industries
This feature lets the production supervisor check whether materials for scheduled production orders are available on the required date. In the workspace, the production supervisor is informed how many production orders are in the scheduled state and are pending release. Based on the dynamic master plan, the information about material availability is updated if material requirements are met by on-hand inventory for actual orders, or planned orders. Based on the information about material availability, the supervisor can release the orders on the Material availability page. During the process of releasing production orders to the shop floor, the feature helps the production supervisor make correct decisions about the allocation of materials to orders.

Production supervisors can now check material availability on production orders in a separate page that is called from the Production floor management workspace.

Although the new Job card device page is designed with simplicity, it’s also designed for touch. The page fits well on mobile devices, such as tablets and phones. The shop floor worker will find less information overload and more intuitive ease of use. The worker can perform the traditional tasks, such as starting, ending, and reporting progress on a job. Besides working on the actual job, or logging and clocking out, the worker can view attachments, break for lunch, and perform other activities. Jobs will be queued to the worker in a planned sequence, but they can also be picked by the worker. The page is...
Manufacturing

primarily targeted at discrete manufacturing operations, where materials are prepared for production.

This is particularly useful in scenarios that are related to reporting of co-products and byproducts, and materials picking by tracing dimensions, use the Job registration page. Also, by introducing an alternative UI that is designed for touch and can be accessed from all types of devices, such as terminal screens and mobile devices, this feature could help to reduce the implementation costs for a traditional rollout of shop floor registrations.

Product variant enhancements*

We are taking product variants to the next level by adding a product variant number nomenclature and by extending default order settings for product variants.

**Product variant nomenclature**: By assigning a product variant nomenclature template to product masters, the product ID's and names generated for product variants follow a specific structure. This makes it easier for you to identify and search for a product variant during order entry.

**Extend default order settings for product variants**: The default order settings have been extended to allow configuration of specific default order settings per variant or per specific product dimension.

The extension is leveraged in all processes in:
- *Sales*
- *Procurement*
- *Production*
- *Lean production and replenishment*
- *Project management*

Supply Chain Management

This release introduces new workflows for the handheld mobile device, which enable you to:

Use the handheld device to register empty kanban through scan of the kanban card. When an empty scan is registered, a new kanban is created to replenish the kanban supermarket.

Register material consumption of un-reserved batches and serial numbers from both license plate and non-license plate controlled locations. The registered material will be posted against the production order in the Production picking list journal.
Supply Chain Management

Cost accounting*

Cost accounting is designed to support global companies and their need for consolidated reporting. You can import data from Microsoft Dynamics 365 for Operations or other external systems via Microsoft Excel.

Cost accounting lets you:
• Classify cost by cost behavior.
• Distribute cost per cost element between cost objects.
• Allocate cost balance between cost objects at a user-defined aggregated level by using cost rollup rules.
• Calculation of cost rate per cost object with a cost breakdown structure

Cost accounting supports managerial reporting and analysis with a modern productivity touch through Workspace, Excel, and Power BI.

Vendor collaboration*

Inviting vendors to collaborate directly in Dynamics 365 for Operations improves the vendor’s visibility of purchase orders and ensures a shared view on responses to purchase orders. This reduces the miscommunication and misunderstandings that can occur when the PO is exchanged by mail or fax.

The functionality for collaborating with vendors has been expanded in this release. External vendors can now respond to individual purchase order lines and suggest changes, such as new dates, quantities, split a line in new delivery dates, or substitute an item with a new item.

The Purchase order confirmation workspace allows vendors to see which POs they need to respond to, which POs are awaiting confirmation by the customer, and which POs have been confirmed but not yet processed with product receipt.

Vendors can suggest changes on lines and exchange documents.

Customers can share notes and documents that are related to purchase orders with vendors, for example, to describe requirements. The vendor can also share notes and attachments with the customer when they respond to the PO. When a vendor responds to a PO, there are different messages that are shown when they Accept, Reject, or Accept with changes. These messages can be customized to better support the business processes of the buying company.

A new external vendor administrator security role enables vendors to add new contacts and update information about contacts and to request new vendor collaboration users.
Supplementary Checks Management

Users with that role can also request that specific vendor user accounts are inactivated, or that security roles are modified. The same functionality is available for users at the customer company.

Vendors can monitor the consumption of consignment inventory to see when the customer takes ownership of inventory. The On-hand consignment inventory page shows the vendor the actual stock level of the inventory that the customer has not yet taken ownership of. The Purchase orders consuming consignment inventory page shows a list of the purchase orders that were generated when a transfer of ownership took place.

Warehouse enhancements for high volume distribution centers

Several enhancements have been made to enhance the productivity of warehouse workers by adding flexibility and effectiveness to operations after work has been created.

Additions to the packing station functionality include the ability to:

- **Create work after packing**: This is important when there are additional processes after manual packing work (such as palletizing, quality inspection, consolidation of shipments, or changes to loading docks). These steps can now be modeled with separate work steps in the warehouse management solution for Dynamics 365 for Operations.
- **Group containers**: This allows multiple packages to be grouped into one container or license plate. For example, an eCommerce operator can group 100 individual packets into one container that can be further processed (moved, staged, loaded) by just scanning one barcode (license plate) for the grouped container.
- **Create a release policy for packed containers**: The creation of work that's triggered by container release can be automated or manual. When it's automatic, work is generated at container closure using the location directive and work template framework. A manual release empowers the packer to decide when the work should be generated - for a single container or for a group of containers. This feature reduces the risk of picking and moving closed containers that aren't yet ready to be moved from the packing station. It allows for non-system steered grouped release.

Warehouse operation enhancements

Enhancements for warehouse operations include:

- **Support for container types in inbound processing**.
- **Reverse ship confirmation is enabled for all source documents, as well as the cancellation of packing slips and product receipts**.
- **Support for receipt and put away of pallets containing mixed items**.

Container types

You may be using different container types in the warehouse to control storage optimization and other processes. The new Container type entity has the physical characteristics of the container types. It's now possible to associate license plates with a specific container type and use location stocking limits. For example, you could use this to control how many pallets (or other container types) you allow at a specific location. Container types have also been added to unit sequence groups to add default container...
Supply Chain Management

types for the receiving process. Container types can be used with inbound and outbound location directives, and as well on the inventory on-hand view to identify how many container types are currently stored on hand. For more information, see this blog: Use of license plates associated with a container type to drive warehouse management processes. The blog describes an update to Dynamics AX 2012, but the same support has now been added to Dynamics 365 for Operations.

Reverse shipments
In a warehouse, it’s important to be able to handle late changes. For example, some goods might be damaged, meaning that it’s not possible to ship them, or there could be a late request by a customer to cancel or change an order. Dynamics 365 for Operations now supports the ability to reverse a shipment to allow for the cancellation of a packing slip that can later be updated with the correct quantities. Similarly, on the inbound flow process is enabled through the warehouse mobile device. For example, when the pallet of mixed items arrives at the warehouse, the receiving clerk identifies the items and the quantities on the pallet, before the pallet is moved to dedicated put-away locations. The put away locations are identified by work templates and location directives. If the put-away locations are spread over several items with fixed locations, this feature will create as many put work lines as there are different items on the mixed pallet. With this feature, registering and put-away of the received mixed items pallets is faster and more flexible. For more information, see this blog post: Receive and register a pallet with mixed source document lines using one license plate and the information about mixed pallet support in the announcement of our recent cumulative update – the same support has been added to Dynamics 365 for Operations.

For more details of what’s new in this fall release go to: http://axroadmap.dynamics.com.

Master planning

Master Planning Workspace

The Master planning workspace offers at-a-glance information about when the last master planning run was completed, whether it had any errors, what the urgent planned orders are, and which planned orders cause delays. Gain quick insight into the status of a master planning run, the urgent planned orders, and the planned orders that cause delays.

Action graph

The action graph provides a better overview, and has options to show only applied and directly related actions. When actions are applied, they appear dimmed but are still displayed to keep the overview. Additional information is added to the action graph to display the data on one page.

Using this new action graphic you could potentially optimize the order date and quantity based on a visual overview of related actions that are pulled from the master planning run; letting you focus only on the relevant actions.
Demand forecasting

Microsoft Excel Integration

Now you can use Microsoft Excel to update your demand forecast helping you to increase efficiency and productivity by accelerating the process of updating directly from a spreadsheet. You can now take advantage of the integration with Excel when working on your demand forecast. Update, delete directly from Microsoft Excel before submitting it to Microsoft Dynamics 365 for Operations.

During your demand forecasting process, you originally could export your historical data to excel. With the new updates, you will now be able to update and edit your demand forecast based on your analysis and additional variables based on exceptions or market conditions and upload it back to Dynamics 365 for Operations.

Azure Machine Learning integration

Estimate future demand by using the power and extensibility of a Microsoft Azure Machine Learning cloud service. The service performs best-match model selection and offers key performance indicators (KPIs) for calculating forecast accuracy. Generate more accurate forecasts by using the machine learning techniques and tools to estimate future demands forecast based on historical transactions.

Based on historical data and defined variables based on your requirements such as weather, traffic conditions you can integrate Azure ML into your demand forecasting process to help you better predict and anticipate potential issues that could impact your product delivery or availability to customers.

Procurement and sourcing

Purchase order preparation workspace

The Purchase order preparation workspace provides an overview of orders from the time when they are created as a draft and traced, through workflow approval states, and onward toward confirmation. Your purchasing department no longer has to seek information from multiple pages but benefit from the overview that the workspace provides.

Use the Purchase order preparation workspace to gain quick insight into the status of purchase orders that are being prepared.

Purchase order receipt and follow-up workspace

The Purchase order receipt and follow-up workspace provides an overview of confirmed purchase orders that have pending receipts or shipments. This workspace includes lists of post-due receipts and pending receipts to help with proactive review and follow-up by the supplier. Purchase orders for which arrival registration has occurred in the warehouse are also listed to help ensure that the receipt is posted. Purchase order returns that haven’t yet been shipped are also available for review. Your purchasing department benefits from the overview that the workspace provides. Relevant information is put together to guide follow-up and help improve productivity.

Use the Purchase order receipt and follow-up workspace to gain quick insight into purchase orders that are pending receipt, to help with follow-up.
A new look and feel
The Category and Product management workspace enables:

- Assortment management
- Assortment lifecycle
- Tracking
# Retail

## Prices and Discounts Workspace
The **Prices and Discounts Workspace** enables:
- **Price and discount management for a given channel and category**
- **Category price rule management**
- **Price and discount priorities, which let you assign priorities to price groups and discounts to control the order in which they are applied**

## Catalog Management Workspace
The **Catalog Management Workspace** enables:
- **Summary of active catalogs**
- **Catalog lifecycle tracking in a single location**

## Channel Deployment Workspace
The **Channel Deployment Workspace** enables:
- **Track channel configuration progress**
- **Take the required steps to complete a task, or provide information to complete the task**
- **Directly download the Retail Modern POS (MPOS) program installation in store**
- **Access all related page**

## Channel Operations Workspace
The **Channel Operations Workspace** enables:
- **Create post statements for a given channel**
- **Track shift status for a given store**
- **Manage worker point of sale (POS) permissions for a given store**
- **Quickly access all related pages**

## EPOS client is replaced with MPOS
The EPOS client is replaced with MPOS and the eCommerce channel has also been added to Retail Essentials by default enabling greater out-of-box channel support and providing a streamlined configuration option for retail-specific implementations and allowing streamlined configurations and a streamlined UI for retail-specific implementations through Microsoft Dynamics Retail Essentials.

## Enhanced support for data entities
Retail data entities have been expanded to support all master and reference data that is related to retail. There is also enhanced support for data entities across the entire Microsoft Dynamics 365 for Operations solution. This enhancement will let Data entities customers have metadata driven import and export of data and OData entities also let customers integrate Microsoft Dynamics 365 for Operations with third-party programs.
## Retail

### BI reports
More than 30 back-office reports and 10 channel-side reports are available in this new version letting customers to access to BI reports to better predict trends, uncover insights and operation at the best possible performance.

### Consumer-level permission POS
Retailers can choose whether POS operations can be available to consumers for self-service scenarios. The new Dynamics 365 for Operations provides the ability to configure this new scenario. Retail Server uses permissions for application programming interface (API) calls.

### Configuration manager and validator
The configuration manager and validator feature provides the ability to bootstrap the configuration, validate the status and completeness of the configuration for the various configuration elements, Manage and validate entity configurations. This feature enables Bulk configuration data upload and business entity validation.

## Retail hardware station

### New hardware profile
An added hardware profile supports more diverse hardware from one station to the next. A new hardware station profile supports a unique terminal ID for each hardware station when electronic funds transfer (EFT) transactions are processed. EFT support has been merged into hardware station to reduce the involvement of MPOS in EFT payment processing enabling POS devices to connect to peripherals such as printers, cash drawers, or payment devices. It provides greater flexibility for implementations and also provides enhanced security and reduced exposure to credit card data.

## Retail server and data management

### OData V4 support
Connect to a Commerce Runtime (CRT) database that stores business data for the channel by using CRT services. This new support will help the customer stay current with OData standards and also could help to create a robust omni-channel experience by integrating sales across in-store, mobile, and online channels.

### E-commerce API
The E-commerce API is now available through Retail Server to support online scenarios and also provides hosted and scalable e-commerce services that can be used with third-party online stores.
### Retail server and data management

#### Cloud re-engineered

**Commerce Data Exchange**

Even when the functional parity is similar to Microsoft Dynamics 365 for Operations 2012 CU8, Commerce Data Exchange has been re-engineered for the cloud and still responsible for managing the data transfer between Microsoft Dynamics 365 for Operations and retails channels such as online stores or brick-and-mortar stores but allowing the Async service to use direct access to the channel database, enabling Commerce Data Exchange to become a real-time service that is hosted as a Microsoft Dynamics 365 for Operations custom service and letting MPOS manage synchronization between offline databases and Retail Server.

#### Credit/debit card features enhancements

Dynamics 365 for Operations supports all existing Microsoft Dynamics 365 for Operations for Retail credit/debit card features plus some new enhancements letting customer process credit/debit card transactions for payments, support plug and play, and semi-integrated cross-channel payment processing by using the payment SDK.

#### Device activation

In this new version of Dynamics 365 for Operations, the device activation can be made using Microsoft Azure Active Directory increasing security and cloud-based activation, Enhanced security for token management, Improved reliability, troubleshooting and error messaging during the activation process. It also offers a simplified process to IT administrative tasks related to the activation of the device. In terms of security, these enhancements can help to stop unauthorized remote use of mPOS and help to track mPOS devices for PCI compliance purposes, it maps physical devices with a business entity and it reports device information from headquarters.

#### Rich media content support

Manage rich media content for authoring and serving through Media Gallery. I help to address pain points around externally hosted images managing them from a single place. It provides powerful content management through Media Gallery for uploaded and externally hosted images, and filtering to find images; lets you easily create bulk associations between externally hosted images and entities such as products and catalogs and also supports Retail-hosted storage for images, and Excel integration for easy updates. Some detailed support can be found in the list below:

- **Image upload, view, manage, and delete from Media Gallery for both externally hosted and Retail-hosted images.**
- **Image upload and view from entity pages (Products, Catalogs, and so on) by linking an image from the gallery and uploading an image from the desktop.**
- **Optimize the images for thumbnail, custom size, and original.**
- **Bulk link entities by using a template and background jobs for bulk association.**
- **Excel integration overwrites the attribute group limitation of naming conventions and predefined paths.**
- **Supports for Offline images and secure images for personally identifiable Information (PII) content, such as Retail-hosted employee and customer images**
Retail offers immersive mobile experiences anywhere, any time, and on any device. In this new version we are providing a new enhanced shopping and store experiences across all channels.

**Modern POS**

Even when we are providing functional parity with AX 2012 MPOS, we have made some enhancement to add some new features for sales staff to process sales transactions, customer orders, and perform daily operations and inventory management, by using mobile devices anywhere in the store. With the new Dynamics 365 for Operations version, we are including the following features:

- Customer lookup across stores/channels
- The ability to create customer orders without accessing Real-time Service
- Improved device activation workflows, status, and error messages
- Extensibility improvements, such as pre/post triggers and activity support to improve customization.

**Cloud POS**

Thanks to the unique architecture provided in this version of Dynamics 365 for Operations, we are introducing a browser based POS with functional parity similar to mPOS and device activation support using AAD. Thanks to the responsive layout design, it can be used in mobile devices and support cross-platform browsers. This new cloud-based POS could help to enable retails to easily activate remote POS stations as needed lowering and reducing deployment costs.

**Flexible e-commerce platform**

In this release customers now have the flexibility to use the content management system of their choice. A robust e-commerce platform is provided to support third-party storefronts letting customers integrate with content management systems to create an omni-channel E-commerce website thanks to the following features added to this e-Commerce platform:

- A rich consumer API
- Authentication integration to any third-party open ID providers
- Payment integration

**Call Center**

Even when the feature parity with the AX 2012 Call Center solution is available (with the exception of price overrides), users can deploy a call center to let workers take orders from customers directly over the phone and create orders, target customers via mail catalogs and streamline operations through fast order entry, assisted sales and fulfillment by using this call center module. All this thanks to a responsive and redesigned UI based on HTML5 that can be accessible via any browser.
Rich clientele experience

Advanced warehousing in Retail store*

This functionality will let retailers use the advanced warehouse management (WHS) solution in their stores. Stores can be modeled as advanced warehouses so it’s possible to take advantage of all the capabilities of advanced warehouse functionality, including hand held solutions. In addition, all current retail store inventory processes and any POS process that creates or updates inventory transactions has been updated to work with the specific requirements for WHS enabled warehouses.

- **POS inventory lookup in WHS enabled store shows the available quantities across other stores and warehouses.**
- **Process a product receipt for a purchase order in POS for a WHS enabled store and items, which makes it easy to select locations and receive into and enter the license plate to auto populate receiving lines.**
- **Process a product receipt for a transfer order in POS for a WHS enabled store and items, which makes it easy to select locations and receive into and enter the license plate to auto populate receiving lines.**
- **Process a shipment of products from WHS enabled store and items, which allows you to select locations to ship from, as well as ignore license plate and inventory status.**

Analytics and intelligence*

Support for Microsoft Power BI Direct Query to pull data from Entity store, which has all materialized views for aggregate entities and regular data entities. In addition, several new reports on the channels, surfaced through Modern and Cloud POS.

In addition, retailers now can up-sell and cross-sell with product recommendation powered by Cortana Intelligence Suite (machine learning). This will be available for general product recommendations based on affinity of products in a shopping cart, and personalized recommendations for a given customer based on their past purchases and items on their wish lists.

e-Commerce & consumer shopping app*

We are continuing to invest and add several capabilities that will enable better integration with content management systems supporting eCommerce Storefronts.

- **Catalog publishing to storefronts through Retail Server.**
- **Support for Service-to-Service authentication.**
- **Ability to create customers asynchronously via e-Commerce storefront.**
- **Adding additional controls that can be leveraged on the e-Commerce storefront.**

In addition, we’re adding a new consumer-facing mobile shopping application that leverages the same e-Commerce components used today.

- **This shopping application will work on iOS and Android phones.**
- **Will allow consumers to browse, search, and complete their shopping experience on a phone, either anonymously or by signing in. In addition, consumers can check order status or previously placed orders.**
- **Retailers can easily use configuration rebranding to change themes to meet their business needs.**
- **Retailers can leverage this shopping application and publish it to mobile app stores (iOS and Android).**
Rich clientele experience

Hybrid cloud - Retail Store*

A key challenge is to support business continuity at stores due to slow and unreliable network connectivity issues. In addition, high volume retailers want to minimize latency for transaction processing at their stores. To address this requirement, we’re introducing a hybrid deployment model for retail stores, which allows retail stores to operate with/without connectivity to the head office hosted in the cloud.

This optional deployment model offers flexibility to retailers to optimize their operations for their business needs by deploying Retail Store Scale unit. Key benefits of this include:

• Symmetrical architecture and components deployed in Azure, which provides Retail Server, Channel database, Async client, and Cloud POS server to be deployed in store.
• Business continuity (network tolerance), as well as improved performance and latency for high volume retailers.
• A simple, easy self-serve installation process that allows Scale unit to be deployed in one box or multiple boxes. Scale unit does not require server infrastructure in the stores and can be deployed on Windows desktop SKUs, including the same PC that runs POS.
• The ability for retailers to run Cloud POS or Modern POS in the store. Retailers can choose to run a combination of these, as well as run on mobile phones, iOS, and Android devices, all in the same store, providing the flexibility to innovate operations.
• Secure and reliable communication between store and head office.
• Modern POS on Windows PC will continue to support offline mode.

Mobility and modern user experience*

We are continuing our investments to enable rich and immersive experiences for retailers anywhere, anytime, and on any device. Retailers can benefit from leveraging a POS application that is built on state of the art, cloud engineered, secure, and flexible architecture, designed and optimized to run on different form factors, and across Windows, iOS, and Android.

Retail Modern POS is simple, intuitive, and easy to deploy, configure, and operate. POS delivers omni-channel excellence, which allows retailers to deepen their customer engagement. Key investments include:

• A single, universal POS application that is designed to run on phones, tablets, and PCs based on Universal Windows Platform.
• Consistent user experiences, including common navigation, recognizable patterns, and intuitive interactions with a responsive and consistent shell.
• Rich functional capabilities that are optimized for touch and keyboard experiences.
• An iOS application for phones and tablets.
• Centrally managed and targeted for stores, registers, or specific users.
• A user interface to match unique processes and the ability to define specific layouts for specific layout sizes targeted for specific devices.
• The ability to allow retailers to ensure that the aesthetics resonates and communicates a unique brand.
• Simple and easy deployment (self-serve).
• Configurability to connect to Microsoft Cloud or Retail Store Server.
Omni-channel*

We continue to focus our investments into adding more Omni-channel capabilities to provide a variety of features that allow retailers to make employees more productive and provide excellent customer service and engagement.

Customer orders allow a store associate to take an order for a customer that can be fulfilled later, either shipped or picked up from store. We’re improving this feature even more by adding the following key enhancements:

• Ability to create an order in store (POS) that allows fulfillment from any warehouse (other stores or distribution centers).
• New hybrid order capability that lets a customer place an order for items to be fulfilled later, while carrying out other items, all part of the same transaction.
• Improved order search experience that allows new options for an associate to look up and retrieve orders placed by customers.
• Ability for an associate to create an order for a customer who chooses the store the order will be shipped from at the time of order creation (also known as a “charge send”).

Payments*

Continued investments in omni-channel payment processing through advancements in SDK and connectors through partners:

• Provide retailers with out-of-the-box PCI-free omni-channel payment solutions.
• PCI-free “turnkey” solutions w/Token and P2PE.
• VeriFone solutions that support retail, e-Commerce, and call center MOTO for the US market.
• MasterCard solutions that support call center MOTO and e-Commerce for 13 markets.
• Out-of-the-box with redistribution rights from MasterCard and VeriFone.
• Payment SDK supports extensibility for customers or independent software vendors (ISVs).

Retail store*

We are adding several new capabilities for retailers to improve their store operations. Some of these key features include:

Tracking sales representatives: Several retailers can track sales representatives and commissions for sales in their stores. Sales representatives may not be the person who is ringing up the sale in the POS. We are adding the ability to set up and manage sales representatives in stores (who may or may not be POS users), set up commission structures, and track capabilities.

• Users should be able to add a sales representative at a transaction level or at a line level.
• Track one or more sales representatives.
• Track sales representatives for cash-carry sale, as well as customer orders.
• Track sales and payout commissions, as well as end of day statement posting processes.
• Configuration options to support prompting, permissions, receipt printing, and more.

Hardware Station: Several improvements to hardware station and peripheral handling of POS include:

• Handling concurrent requests.
• Modern POS application to use hardware out-of-box without configuration.
• POS auto-switches to leverage shared peripherals without app restart.
• Simplified configuration, including removal of hardware station profiles or types, such as shared/dedicated, notify, or prevent devices not meant for shared usage, etc.
• Support for Windows 10 Universal Windows peripherals support - Cash drawer and Receipt printer.
Warehouse management

Warehouse Mobile Devices Portal

In this version of Dynamics 365 for Operations, a stand-alone installer can be downloaded directly through a menu item in Warehouse management instead of the standard Dynamics 365 for Operations setup process. It's designed for self-driven on-premises deployment and configuration. During the enabling process of the Warehouse management module to use the mobile device functionality, you need to install and configure the Warehouse Mobile Devices Portal locally and get a connection to the Microsoft Dynamics 365 for Operations program in the cloud.

Sales

Delivery alternatives page

Based on the existing algorithms for delivery date calculation, the Delivery alternatives page offers a new user experience for order promising. As part of the new experience, this page consolidates relevant information from multiple forms onto one space, shows "ready-made" alternative delivery packages, such as a combination site/warehouse/variant/transport mode, based on the fastest delivery (earliest available date) criterion that the user can choose from and let the user select options from the simulation interface and transfer them to the sales order line.

This new experience can help organizations that aspire to provide high customer service while committing to an inventory optimization strategy could now promise orders reliably and competitively. After all, their customers’ own business requires that products be available on time. The Delivery alternatives task page makes the order promising task quicker, easier, and more systematic by identifying and recommending the best alternative order delivery dates in one interactive place.
A new look and feel
What’s new?
Domain updates
# Financial management

## Account structures enhancements

Many customers have requested the ability to export account structures to Excel for easier filtering. In this new release, we’ve made enhancements to this feature and now you can now select an account structure and export it to Excel.

Also, FactBoxes have been added to the account structure page for easier access to important information when account structures are defined and edited.

## Chart of accounts page enhancements

FactBoxes have been added to the Chart of accounts page for easier access to important information when a chart of accounts is defined and assigned.

## Trial balance list page updates

An additional parameter has been added to the Trial balance list page to include closing transactions in addition to closing period adjustments. We’ve made this addition for a more concise analysis of data and it is also required for regulatory reporting in some countries/regions.

## Global journal entry

The ability to enter a general journal for any company the user has access to regardless of the company the user is logged into to improve efficiency of organizations consisting of multiple legal entities.

## General journal processing workspace

The workspace can be accessed through the Dynamics 365 for Operations dashboard. It includes different views of general journal entries such as journals posted this period, journals posted previous period, and any unposted journals. The workspace also provides the ability to enter, post, and approve journal entries in addition to commonly used inquiries such as Trial balance.

## Accounting source explorer

New inquiry that provides greater visibility into the source of general journal account entries, making analysis and reconciliation easier for customers. Accounting source explorer is currently enabled for entries originating from expense, timesheet, and vendor invoices.

Additional integration points will be added in subsequent releases.

## Financial reporting in Dynamics 365 for Operations

Twenty-two out-of-the-box financial reports are included in Dynamics 365 for Operations to give customers a jumpstart on report design. These 22 reports can be accessed from multiple menu items within the Dynamics 365 for Operations. Report options have been added so that different filters can be applied to these out-of-the-box reports as well as to any custom reports. These options allow consumers of financial reports to now apply different filters for dimensions, dates, attributes, and scenarios without requiring updates to report designs.
Financial management

Viewing financial reports

All financial reports created in Management Reporter – report designer can be accessed in the Dynamics 365 for Operations client. The user selects a report to view, and the report is displayed in the client. Due to this new feature, you can now view financial reports without having to access a different client/application.

Content Pack for Power BI

In this new release, we are adding a “Monitor financial performance” content pack for PowerBI that could help you analyze financial data. By creating greater integration between Dynamics 365 for Operations and PowerBI, organizations can deploy a PowerBI financial performance dashboard containing Dynamics 365 for Operations financial data with just a few clicks. The content can then be personalized to meet organizational needs.

Ledger budgets and forecasts workspace

The workspace can be accessed through the Dynamics 365 for Operations dashboard. It includes links to several new inquiry pages such as actuals vs. budget summary, Budget control statistic summary, Budget register entries, and Budget plans. This new workspace combines all budget maintenance and monitoring task in one place that is easy for budget managers or accounting managers to use.

Budget plans and forecasts enhancements

Due to the new enhancements you can now have the flexibility to create and edit budget plans by using both Excel and the Dynamics 365 for Operations client. Templates for Excel workbooks can be generated by using the Budget plan layout setup. You can combine selected financial dimensions, user-defined columns, and other row attributes (such as comments, projects, and assets) in the layout; Users can switch the layout for the budget plan document on the fly and edit data by using any selected layout. Additionally, budget planning configuration is simplified by eliminating scenario constraints and using layouts to define which data can be viewed and edited in each budget plan document stage.

Vendor Invoice Transactions report enhancement

In this release we are consolidating both vendor invoice transaction reports and the detailed due day list report into one single report. Due to this change, we are eliminating the needs of printing out two separate but related reports.

Generate regulatory reports enhancement

In this release, we are providing with a unified experience to display reports on both digital and printed copy. We adding the option to generate regulatory reports directly in PDF format.

Payment file validation

In this release we have made changes to the payment file generation process by adding a verification step to help verify that kana name fields contain only the right characters permitted by the JBA bank format.
Financial management

Settlement process update

For periods that have many tax transactions, the process can be time consuming and it might be better to run the process in the background. Due to this requirement, in this release we have added the option for the settlement process to run as a batch process. You can set this option directly on the Sales tax settlement period page and specify to run the settlement process in batch mode.

Financial period close workspace

The workspace can be accessed through the Dynamics 365 for Operations dashboard. The Financial period close workspace facilitates the closing process by enabling users to define, schedule and communicate close activities within or across companies. The end result is a reduction in the number of days to close.

Customer invoicing workspace

The workspace can be accessed through the Dynamics 365 for Operations dashboard. The primary function of this workspace is to facilitate the customer invoicing process. It includes different views of invoice work to be completed as well as invoice posting history. Links are provided to commonly used inquiries, reports and menu items such as customer invoices, shipped but not invoiced and the invoice journal.

Vendor invoice entry workspace

The workspace can be accessed through the Dynamics 365 for Operations dashboard. The primary function of this workspace is to facilitate the entry of vendor invoices. It includes different views of purchase orders and product receipts that are ready to be invoiced as well as unposted vendor invoices. Links are provided to commonly used inquiries and menu items such as open vendor invoices and the invoice journal.

Vendor payments workspace

The workspace can be accessed through the Dynamics 365 for Operations dashboard. The primary function of this workspace is to create vendor payments. It includes different views of invoices and payments such as invoices past due and payments not settled. Links are provided to commonly used inquiries and reports such as vendors on hold and the vendor aging report.

Accrued purchases report

A new report has been added to provide insight into the documents that have been received but not invoiced, enabling invoicing clerks to better predict their workload. Additionally, this report can be used to aid in the reconciliation of the Accounts Payable subledger and the General Ledger.

Payment advice report

The payment advice report is now using Print management, allowing the report to be emailed separately to each vendor or customer. In addition, you now have the ability to reprint this report after the payment has been generated but before it's posted. The ability to reprint the report after the payments are posted has also been added for additional payment types.
Financial management

Accounts payable*

Accounts payable helps you track vendor invoices and outgoing expenditures. You can enter vendor invoices manually or receive them electronically through a service. After invoices are recorded, you can review and approve them. You can use invoice matching, vendor invoice policies, and workflow to automate the review process so that invoices that meet certain criteria are automatically approved, and the remaining invoices are flagged for review by an authorized user. After vendor invoices are approved, you can pay vendors. If your organization includes multiple legal entities, you can use centralized payments to pay all invoices from a single legal entity.

- **Enhanced visibility of prepayment invoicing activity**: The *Open prepayments* list page has been added to provide a snapshot of the status of prepayment invoicing activity. The page will provide the accounts payable department with information about purchase orders that have remaining prepayment values to be invoiced, invoiced values that need to be paid, and paid invoice values that need to be applied to standard invoices. Additionally, enhancements for the automatic application of paid prepayment invoices to standard invoices provide a more efficient data entry experience for the invoicing clerk.

- **Vendor collaboration invoicing workspace**: A new *Invoicing workspace* in the vendor collaboration area allows an external vendor to securely access their own invoice information, such as whether an invoice has been paid, and submit their own invoice. This promotes more efficient and timely communication with external vendors, resulting in fewer interruptions to the invoicing clerks.

- **Ability to switch legal entities during invoice entry**: For invoicing clerks who are responsible for entering invoices for multiple legal entities, enhancements allow for quickly changing the legal entity from within the invoicing pages. This feature saves time by no longer having to sign out of the current legal entity and sign into a different legal entity. Both the *Global invoice* journal and the *Vendor invoices* pages now support being able to change the legal entity during data entry.

- **Electronic file support for the IRS 1099 Combined Federal/State filing program**: When the US configuration key is enabled, the 1099 electronic filing process provides additional functionality that complies with the IRS regulations for the Combined Federal/State filing program. This program was established by the IRS to allow the IRS to electronically forward information returns to the participating states.

- **Settlement enhancement**: Enhancements promote settlement efficiency for payment clerks by providing the ability to allow multiple unposted payments to be settled against the same invoice.

- **Cross company view**: Support has been added to allow centralized payment clerks to be able to view past due invoices across companies. The *Vendor payments* and *Customer payments* workspaces have been enhanced to provide better visibility and control of overdue invoices by providing a way to view and filter across companies that are part of a centralized payment organizational hierarchy.

Accounts receivable*

Accounts receivable helps you track customer invoices and incoming payments. You can create customer invoices that are based on sales orders or packing slips. You can also enter free text invoices that are not related to sales orders. You can receive payments by using different payment types, such as bills of exchange, cash, checks, credit cards, SEPA, and other electronic payments. If your organization includes multiple legal entities, you can use centralized payments to record payments in a single legal entity on behalf of the other legal entities.
Financial management

- **SEPA prepayments**: SEPA functionality has been enhanced to allow generation of a SEPA payment without a backing invoice.
- **Reimbursements**: Customer reimbursement functionality has been improved to allow reimbursing a customer in transaction currency.
- **Prices including sales tax**: Prices including sales tax feature on free text invoice is now available for all countries/regions. If the sales tax is included in the total price, there is no need to separate the sales tax when entering an invoice. If the Prices including sales tax check box is selected, the sales tax will be automatically calculated based on the total price.
- **Settlement enhancement**: Enhancements promote settlement efficiency for payment clerks by providing the ability to allow multiple unposted payments to be settled against the same invoice. For instance, a customer invoice may now be settled with two unposted payments, such as cash and check.
- **Cross company view**: Support has been added to allow centralized payment clerks to be able to view invoices past due across companies. The Vendor payments and Customer payments workspaces have been enhanced to provide better visibility and control of overdue invoices by providing a way to view and filter across companies that are part of a centralized payment organizational hierarchy.
- **Customer payments workspace**: A new Customer payments workspace has been added to provide insight into invoices that are overdue and payments that need the clerk's attention. Additionally, the payments clerk can quickly access frequently used reports, such as aging and deposit reports.

Budgeting*

Use Budgeting to set up, create, and view budgets. Budgeting can include budget control, which you can use to monitor the budget funds that are available for planned and actual purchases and expenditures. You can create budget register entries for the original budget, budget transfers, and budget revisions. You can also create budget register entries for encumbrances and pre-encumbrances for purchases and planned expenditures. Budget register entries can be created automatically when budgets are transferred to the general ledger from other modules, such as Project management and accounting or Fixed assets.

- **Basic budgeting**: Budget exactly how you want by choosing the detail level to track your budget, and take advantage of your existing advanced rules that have been configured. Allow advanced rules in the budgeting process to provide extra budget tracking capabilities by financial dimensions.
- **Budget planning**: Provide support and justification for your budget by uploading documents that support your budgeting requests. By having the ability to upload your documents, your entire budgeting process is contained, centralized, and available for the budgeting manager to review.

Cash and bank management*

Cash and bank management gives you the ability to manage legal entity bank accounts and the financial instruments associated with bank accounts, such as deposit slips, checks, bills of exchange, and promissory notes. Advanced bank reconciliation functionality saves you time with automated matching between electronic bank statement lines and bank transactions, allowing you to focus only on the exceptions. Visibility into your bank balances and transactions is available in several ways, including charts, reports, and inquiries.
Financial management

• **Bank management workspace**: A new Bank management workspace is available to help track bank accounts and balances for your legal entities. Current and pending balances are immediately available for all accounts, with the ability to drill back from the balances into the detailed transaction vouchers. You can also see the historical balance data for each bank account, or summarized for all bank accounts in the company, in both short and long term views. There is increased insight into bank account reconciliation, with last reconciled dates reported for each bank account as well as an indication for reconciliations in progress.

• **Bank statement import across companies**: You can now import electronic bank statements for all legal entities with a single step. Bank statement files can contain statements from many bank accounts and legal entities, and zip files can contain multiple bank statement files. Using a single import process, you can start the reconciliation for all reported bank accounts in all legal entities, saving you time from switching companies and multiple statement imports. You can also automatically run matching rules against all imported statements in each company.

Credit and collections*

Credit and collections enables enterprises to lower their days sales outstanding (DSO) and reduce credit risk. This provides support for key processes such as managing credit, delinquencies, disputes, write-offs, and organizing the interactions between the collection agent and customer through collection cases.

For the complete list of new functionality refer to: [http://axroadmap.dynamics.com](http://axroadmap.dynamics.com).

Expense management*

You can create and approve travel and other business related expenses for reimbursement using the Expense Management module. Policy rules can be configured to meet the expense reimbursement policies of your organization, such as requiring receipts to be attached for specific categories or expenses over a specified amount or requiring itemization of categories such as hotel expenses. Flexible workflows can be defined for expense line or expense report approvals.

For the complete list of this new functionality refer to: [http://axroadmap.dynamics.com](http://axroadmap.dynamics.com).

Financial reporting*

Financial reports provide insights into an organizations financial state at the end of defined periods. You now have the capability to do the following:

• **Format your report to contain line numbers to easily identify report rows and statutory formats.**

• **Choose the financial reporting financial dimensions and attributes that you want in the General ledger. This prevents unnecessary information from showing on your report if it is not critical to financial reporting.**

• **Print read-only, presentation ready financial reports to PDF with Microsoft SQL Server 2016.**

• **View additional details and versions of the financial reports with the report list.**
Financial management

enhancements. The list of reports shows when the report was last generated and how it was modified by. You can also quickly filter your report list by a folder name so you only see the reports relevant to you. View previous versions of the report to accurately track the change in data over time.

- View translated financial data, by any currency in the system, simply by choosing the currency in the report.
- Make it easy for users to see the generated date and time on report headers or footers on a financial report by adding the new auto text options. Knowing when a report was generated provides crucial information to a user on how new the report data is.
- Analyze data more efficiently with financial dimensions in separate columns when exporting to Microsoft Excel.

Fixed assets*

Fixed assets will help you manage your capitalized assets over their financial lifecycles, with automated processes to increase your efficiency in tracking values and reduce reporting errors. Fixed assets can be configured to track multiple valuations, for different purposes such as corporate and tax reporting. Fixed asset functionality is highly integrated with other areas of the product, including General ledger, Accounts payable, Accounts receivable, Inventory, and Project. You can acquire assets automatically through the purchasing process, using capitalization thresholds as defined by your organization. Capital projects can also be converted into an acquired fixed asset when the project is complete. Depreciation is automatically calculated based on defined methods, and posted to the general ledger as configured. Fixed assets can be sold or scrapped through journals, or can be sold as a part of the sales process using a free text invoice.

For the complete list of this new functionality refer to: http://axroadmap.dynamics.com.

General ledger*

Use General ledger to define and manage the legal entity's financial records. The general ledger is a register of debit and credit entries. These entries are classified using the accounts that are listed in a chart of accounts.

You can allocate, or distribute, monetary amounts to one or more accounts or account and dimension combinations based on allocation rules. There are two types of allocations: fixed and variable. You can also settle transactions between ledger accounts and revalue currency amounts. At the end of a fiscal year, you must generate closing transactions and prepare your accounts for the next fiscal year.

For the complete list of this new functionality refer to: http://axroadmap.dynamics.com.
## Human capital management

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant records automatic update</td>
<td>Upon completion of a course, a new option will be available to update a participant’s records with the new skills and certificates. Due to this new update an automatic update of employee records take place.</td>
</tr>
<tr>
<td>Quickly verify employment update</td>
<td>Your HR department doesn’t need to have access to multiple pages any more to verify start date, manager, months in position, and compensation data. The HR corresponding person can quickly verify employment by using a workspace or the employee page.</td>
</tr>
<tr>
<td>Employee personal data update</td>
<td>Let’s employees take control of their information whether that involves updating address or contact information, applying for a job, taking a questionnaire, or updating their image. When a workflow is enabled, information can be reviewed by an approver or automatically approved, based on your business processes. This feature is enabled, and will let employees and contractors view a wide range of personal data. Optionally, a workflow can be used when information is created, updated, or deleted.</td>
</tr>
<tr>
<td>Employee data update</td>
<td>This new feature will allow managers to access important employee data, for them to make better decisions about resourcing, performance, and employee development. Depending on configuration settings and security, managers are empowered to view or edit employee information.</td>
</tr>
<tr>
<td>Encrypted ID numbers</td>
<td>Encrypted employee ID numbers are critical to secure data management. In this release we are adding encryption to all employee (SSN) numbers.</td>
</tr>
<tr>
<td>Compensation processing results update</td>
<td>This feature provides an excellent audit of the process and the outcome of the process. It also provides a comprehensive view of the data before employee records are updated. Compensation processing results can now be accessed at any point after the process has run</td>
</tr>
<tr>
<td>Benefits processing results update</td>
<td>This feature provides a comprehensive view of the data that is updated by benefit enrollment and cost changes. Benefits processing results can now be accessed at any point after the process has run.</td>
</tr>
<tr>
<td>“Date Effective” timeline changes</td>
<td>This feature saves time when you view changes that have occurred over time to employees, positions, and job records. It lets you quickly compare two versions of a record, or all records, over time. This comparison tool is available for employees, positions, and jobs and it provides a comprehensive view of changes from one version of a record to another.</td>
</tr>
</tbody>
</table>
Human capital management

View employees by company update
This feature provides a filtered view of employees that are employed in the logged-on company. For an unfiltered view of all employees and contractors, the worker list is still available. In Dynamics 365 for Operations, the system doesn’t change company based on the employee that is selected in the list. Employee and contractor lists are automatically filtered by the company that you’re logged on to.

Course participants list update
This feature provides an easy way to update course participants that might have registered by mistake. Course participants can be removed from the participants list.

Manage compensation events updates
This feature provides a simple, streamlined process for updating employee records through the compensation workspace and related pages.

Enhanced analytics for Human Capital Management*
Additional Microsoft Power BI reports are available through Lifecycle Services (LCS) to give managers the information needed to help make decisions faster.

Workforce metrics
• Analyze headcount across all organizations, by company, department, and manager.
• Understand the demographic breakdown of your workforce, including the amount of diversity it encompasses by showing a breakdown of employees’ ethnic origin, age, gender, and marital status
• Clarify attrition by viewing your organization’s rate of turnover, reasons for turnover, trends, and attrition analytics
• Analyze the longevity of your workforce by reviewing the time that it takes to fill open positions, the average number of months an employee remains in a position, and which positions are currently open in your organization

Compensation and benefits reports
• Break down compensation, including average pay, salaried versus hourly, and cross-company compensation patterns
• Analyze benefit enrollment, including enrollment statistics, and a breakdown of benefits provided to employees and contractors

Recruiting reports
• Shows the effectiveness of your recruiting efforts by listing the sources of applicants, the number of applicants by job, the diversity of the applicant pool, the distribution of internal versus external candidates, and current applicant status
• Break down staffing for jobs, analyzing the information by source and diversity metrics

Training reports
• Show the effectiveness of your training registration process.
• Provide data that lets you review which employees attend training
• Competency and development reports
• Analyze the effectiveness of employee development courses
### Human capital management

#### New termination rules*

When ending a contractor or employee’s employment contract, new options are available to also end/expire all the employee’s fixed and variable compensation. This single-step process eliminates the need for any manual adjustments and eliminates mistakes during data entry.

You can expire benefit enrollment as employees and contractors leave the organization, and optionally keep any future-dated benefits.

#### New workflows enabled in Human Resources*

**Employee identification workflow**: This new workflow lets employees update their driver’s license, passport, national ID, or other form of identification, and then route the changes for review and approval through standard workflow processing.

**Position based hierarchies now available in workflow**: Workflows across Dynamics 365 for Operations can now use all position-based hierarchies when the hierarchies have been defined. You can route expenses through a matrix hierarchy, route the time worked on a project through a project hierarchy, and manage promotion requests through a managerial hierarchy. All user-defined hierarchies can now be used in workflows across the product.

#### Regulatory updates*

**ACA reporting**: Support has been added for the Affordable Care Act (ACA) reporting in the United States. Full paper-based and electronic reporting is now available, in addition to support for information tracking of 1095c and 1095b forms.

#### Talent management*

We’ve added a configurable performance management process to enter and accept traditional and continuous feedback. Enhancements to performance goals improve the ability to manage employee, manager, and strategic goals.

The new review process accommodates both lightweight or full reviews and is fully integrated as part of the process.

Additionally, you can track “evidence” in performance journals that can be shared with managers and provide real-time feedback.

You can also enter praise for other employees and share feedback with managers to aid in the performance review process.

#### Transitioning employees and contractors*

This new feature supports the following scenarios:

- **Contractors can now be transitioned to employees through a streamlined process.** This process creates new employment records and optionally ends benefits while maintaining the complete history of the transition, as well as the contractor’s information.

- **Employees can be transitioned to contractors within the organization through an efficient, thorough process.** This process lets you add detailed contractor details, end compensation for the employee and if you choose, ends benefits while maintaining complete history of the transition and the employee’s information.

#### US Payroll*

United States payroll is enabled for full end-to-end payroll processing. We’ve redesigned the user interface, added new workspaces to manage payroll processing, and included employee self-service that employees can use to view and/or print their historical pay statements.
A new look and feel
What's new?

Platform
Branding

One of the most notable changes in this release is a branding change: Dynamics 365 for Operations has been rebranded to Dynamics 365 for Operations. Microsoft Dynamics 365 for Operations is now part of the new Microsoft Dynamics 365 umbrella. This change has mandated rebranding in terms of both the product name and the product icon. The new name for Dynamics AX is Dynamics 365 for Operations.

Mobile

You can now design mobile experiences to enable your users to stay productive while on the move.

Dynamics 365 for Operations brings support for a mobile phone app (available on the iTunes App Store for iPhones, Google Play Store for Android phones, and Windows Store for Windows phones). The mobile approach allows you to reuse business logic and modeling from the product while enabling rich offline and mobile interactions, and an easy-to-use designer experience.

Developers can create simplified forms in Microsoft Visual Studio and then design mobile pages that expose this functionality. This mobile solution makes it easy to change the forms and mobile app definitions in order to include customizations made to the product.
### Visual Studio Integration

Use Microsoft Visual Studio to develop your solutions. In preparation to the release of the new version of Dynamics 365 for Operations, we’ve made the change to enable standard interoperability with other .NET languages and projects.

### Compile Common Intermediate Language (CIL) for all features

The brand new X++ compiler generates CIL for all features. CIL is the same intermediate language that is used by .NET-based languages. CIL is faster, can efficiently reference classes in managed DLLs, and can run on a large tool base of .NET utilities.

### Flexible Microsoft Dynamics 365 for Operations client

The flexibility of the new Dynamics 365 for Operations client will give the ability to developers to embed business intelligence (BI) reports and visualizations directly in the Microsoft Dynamics 365 for Operations client in order to create highly-intuitive and fluid visualizations.

### Microsoft Office Integration

In this release, we are bringing new capabilities to increase the integration with Microsoft office and now we are including the Excel Data Connector app, Workbook Designer page, Export API, and Document management that will let you create productivity solutions for your end users to maximize their time.

### Topology automation

Deploy the Developer topology with Developer and Build VM. Auto-configure Build VM to discover, build modules from Visual Studio Online VSO, and run tests. C# and X++ module compilation and references are supported. This new functionality will let developers to increase productivity by reducing costs and efforts for testing and validations. All thanks to the flexibility of the Microsoft cloud.

### New customization model

Dynamics 365 for Operations has a new customization model to let you customize source code and metadata of model elements that are shipped by Microsoft or third-party Microsoft partners.

### New tools for performance evaluation and tuning

The software development kit (SDK) lets you test and validate all critical business processes for performance in a single and, if applicable, multi-user test run. The Data Expansion Toolkit lets you properly expand all performance tests that need master and transactional data expanded properly. The Trace Parser lets you validate a single-user performance test or a multi-user run. The PerfTimer lets you see whether any query or any specific method call is causing a performance issue instead of taking a trace and analyzing everything in detail.
Developer

**OData service endpoint**

In this release we introduce a public OData service endpoint that enables access to Dynamics 365 for Operations data in a consistent way across a broad range of clients. Your solutions can interact with RESTful services, share data in a discoverable way, and enable broad integration by using the HTTP stack protocol.

Foundation

**Anytime, anywhere access**

With the introduction of this new release and the new redesigned UI, the two AX 2012 clients have been replaced by a single, standards-based web client that provides the full set of functionality of the desktop client together with the reach of the Enterprise Portal client. By doing this change, we are also preventing development efforts from being split between two UI platforms and eliminates the need for Terminal Server by using standard web interfaces.

Help

**Task guides**

This is the first time that we have been able to exercise the Help system for Dynamics 365 for Operations. You can try some of our task guides and create your own. To access the wiki for CTP7, you must sign in by using a shared account. The Dynamics 365 for Operations Help system displays task guides that are stored in Microsoft Dynamics Lifecycle Services (LCS) Business Process Modeler, and topics from the Microsoft wiki. For more information, see Dynamics 365 for Operations Help – Getting Started.
A new look and feel
What’s new?

Cloud
Lifecycle management

LCS provides a set of services that customers and partners can use to manage the lifecycle of the system from signup to daily operations.

Manage Cloud deployment services

The cloud deployment services provide the several new benefits such as reduced deployment efforts and complexity for Retail HQ components, Native deployment to the Microsoft Azure public cloud and Improved self-service installation of in-store components to make configuration easier and more intuitive. Also we provide with several topologies that can be deployed to the Microsoft Cloud:

- Retail 1-box trial topology
- Retail multi-box high availability topology
- Developer topology with the Retail SDK

Additionally, there is an improved “low-touch” client component installation via self-service installation for Retail Modern POS, Retail Hardware Station and Support for the upload and distribution of customized packages through self-service installation.

Monitoring and diagnostics

Monitoring and diagnostics for Retail components is now available through the Operational Insights dashboard in LCS. The Operational Insights dashboard is a cloud-based monitoring portal that replaces the need to install the System Center Operations Manager (SCOM) infrastructure.

Retail installation packages

Because there are only two installation packages, one for MPOS client and the other for the Retail Hardware Station component, self-service has reduced the amount of work that is required at every level to install these client components. For more information, see Retail Modern POS and device activation scenarios and Retail hardware station configuration and installation. Additionally, organizations will be able to create, configure, download, and install Retail Hardware Station and devices by using self-service. With this new feature, Self-service aims to minimize requirements and make it easier for a user to perform an installation.

Servicing environments*

Servicing environments includes all aspects of deployment and use of Dynamics 365 for Operations, from onboarding and implementation to updates and monitoring and through service termination. For each successful implementation of Dynamics 365 for Operations, Microsoft, the customer, and partners or ISVs (when applicable) have specific roles and responsibilities.

You can use these features to service your Dynamics 365 for Operations environment:

**Use a Dynamics 365 for Operations trial**
A 7-day trial of Dynamics 365 for Operations will be made available through a simple email signup. The trial version of Dynamics 365 for Operations includes a Getting started
Lifecycle management
guide that provides a step-by-step task guide, which allows you to view specific scenarios in action. The product is available to explore and exercise scenarios. Demo data is included to ease the use of the product and to make the experience more meaningful. A reminder email will be sent 3 days prior to the trial expiration. A buy experience can be initiated at that time to complete the purchase.

**Rollback the environment state when package application fails**
In previous versions, when package application initiated through Lifecycle Services (LCS) fails, there was no way to roll back the environment state. The only possible to do this was through manual intervention. Now you can rollback your environment state through LCS.

**Merge up to 3 deployable packages**
This feature significantly reduces the downtime resulting from the application of these packages, and optimizes applying these packages and the overall wait time.

**Apply deployable packages with reduced downtime**
Currently, the average downtime needed to apply a single package in an environment deployed through LCS is 5 hours. With this feature, the package application is optimized so that the downtime is greatly reduced.

**Troubleshoot deadlocks using monitoring and diagnostics tool in LCS**
With this feature you can troubleshoot deadlocks using the monitoring and diagnostics tools in LCS to review the query that has deadlocks and perform advanced troubleshooting by reviewing the deadlock graphs.

**Copy databases between environments**
This feature lets you request a database copy from one SQL Azure-based environment to another, which will be fulfilled automatically by the system in near-real-time. This reduces the time required to copy databases.

**Take advantage of improvements in disaster recovery**
We’ve added more automation to disaster recovery to reduce the recovery time.

Web client*
You’ll notice the following changes when working with the web client:

**Use the down arrow in a grid to add a new row**
When adding rows to a grid, the use of down arrow to create a new row would be ignored if the current row contained incomplete information. This behavior was inconsistent with the use of the Add New button and its shortcut Alt+N. Using the down arrow to create a new row is now consistent.

**Some application programming interfaces (APIs) are now deprecated**
With the introduction of a new web-based platform, the Dynamics 365 for Operations platform offers a complete set of new interactive controls. In some cases, seldom used properties or methods were deprecated on controls that existed in Dynamics AX 2012. In the case of the FormListControl, some seldom used methods were not implemented but their API were not marked as deprecated. With this release, those methods are now marked as deprecated.
Globalization and translation*

In Dynamics 365 for Operations we extended our country/region localization and translation footprint.

**Additional 18 country localizations:** We now provide further country/region-specific capabilities to meet local regulations for the following 18 countries: Austria, Belgium, Brazil, China, Czech Republic, Estonia, Finland, Hungary, Italy, Latvia, Lithuania, Norway, Poland, Saudi Arabia, Spain, Sweden, Switzerland, Thailand.

**Arabic language support:** We provided Arabic (Saudi Arabia) language translation including Right to Left and Bi-Directional language support.

**User documentation in 24 languages:** We published Help documentation in the following languages: Arabic (Saudi Arabia), Czech (Czech Republic), Danish (Denmark), Dutch (Netherlands), English (US), Estonian (Estonia), Finnish (Finland), French (France), German (Germany), Hungarian (Hungary), Icelandic (Iceland), Italian (Italy), Japanese (Japan), Latvian (Latvia), Lithuanian (Lithuania), Norwegian Bokmål (Norway), Polish (Poland), Portuguese (Brazil), Russian (Russia), Simplified Chinese (China), Spanish (Spain), Swedish (Sweden), Thai (Thailand), Turkish (Turkey). Note that Microsoft does not ship the Turkish functional localization and its documentation. It is an independent solution vendor (ISV) opportunity.

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**Dynamics Translation Service**

We upgraded the ERP Translation Solution to be an LCS hosted service. The new Dynamics Translation Service provides ISVs and partners with an automated translation service for new and existing languages for Dynamics 365 products and solutions. The output is directly produced in the expected language resource file formats for these products. In addition, this service provides the full leverage of the Dynamics legacy translation assets, which allows ISVs and partners to leverage their own legacy translation assets as well as review and edit the translation output.

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**Localization configurations**

For a complete list of this functionality refer to http://axroadmap.dynamics.com
A new look and feel
Microsoft Dynamics 365 for Operations

Microsoft Dynamics 365 is the next generation of intelligent business applications that enable organizations to grow, evolve and transform. These applications unify CRM and ERP capabilities by delivering new purpose-built applications that work seamlessly together to help manage specific business functions. Technology empowers you to adapt and grow - it helps you engage customers, empower employees, optimize operations, and reinvent products and business models. Microsoft Dynamics 365 helps you accelerate your digital transformation to meet the changing needs of your customers and capture the new business opportunities of tomorrow.