

Microsoft Dynamics AX 2012 R3 Preview





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In this era of the customer – where technology has transformed the social fabric of how we engage, connect and interact with one another – it is critical for businesses to gain insight into their customers' needs in order to deliver experiences that build lasting relationships. Operating in today's digitally-connected world impacts businesses in so many ways, that adapting to customer preferences with agility and speed is essential.

Microsoft Dynamics AX 2012 R3 gives organizations an exceptional customer focus by being able to take advantage of cloud services, run agile operations that exceed customer needs, and help engage customers on their terms across the Web, social, apps and mobile fronts. It introduces a new end-to-end apps and services framework, allowing businesses to develop and distribute modern apps for specific scenarios and mobile devices that can easily and securely connect with Microsoft Dynamics AX for people at work and on the go.



When delivering amazing experiences is your intention – Microsoft Dynamics AX 2012 R3 is your solution.



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Cloud

- Microsoft Dynamics AX 2012 powered by Microsoft Azure laaS (Infrastructure as a Service)
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- Microsoft Dynamics Lifecycle Services on Microsoft Azure
- Modern apps and mobility with Microsoft Azure App Services
- Microsoft Dynamics AX cumulative updates



 $^{^{\}star}$ Mobile POS will be available after General Availability of Microsoft Dynamics AX 2012 R3



Warehouse Management

The new Warehousing Management module helps organizations provide flexibility, and choice to customers. The automation of warehouse processes help reduce operational costs which can be translated in lower prices for customers.

Features include: easily configurable put away and picking workflows, advanced cycle counting and location replenishment capabilities, support of cluster picking, warehouse handheld device support, and support for different picking strategies for batch and non-batch items.

Warehouse managers gain visibility and the ability to effectively control and run their put away, quality control and picking warehouse operations. And, with a flexible warehouse workflow engine, warehouse managers will be able to rapidly respond to any changing business demands.

In addition, handheld device capability, which comes out of the box, gives warehouse workers scanning precision and enhanced performance in picking and put away processes.

Provide customers with choice and flexibility of delivery with agile in- and outbound processes:

- Meet customer demands with advanced picking strategies including cluster picking.
- Efficiently put away inbound goods with advanced put away strategies.
- Increase flexibility by configuring simple workflows without coding for put-away and picking activities. Use filter capabilities to determine the custom workflow.
- Provide warehouse workers with material handling instructions based on the system or directed by the user (task interleaving).
- Process waves: automatic, manual, batch-time scheduled, filtering and grouping, and container calculations packaging.
- Support for cross-docking, and pick/pack.
- Improve tracking and tracing of goods with registration of serial numbers in picking process and batch number support with picking strategies and put-away, based on expiry date.
- Optimize transportation loads with containerization of shipments including auto volume and weight calculations.
- Manage sales order returns using warehouse workflow.

Lower inventory costs and improve turn-over with advanced inventory allocation:

- Replenish inventory based on picking, min/max, and transportation load-based replenishment.
- Use flexible location directives to organize your warehouse layout and zones.
- Improve your customer service level with real-time visibility into inventory using the inventory dimensions including license plates.
- Account for inventory with multiple cycle counting strategies including threshold cycle counting for picking, cycle counting plans, zero quantity on hand cycle counting, and ad-hoc cycle counting using filtering.
- Advanced property control for warehouse locations, control of mixed items, mixed batch numbers, mixed inventory statuses, thresholds, advanced volume or amount based multi-unit setup for put-away limits calculations and location allocations.
- Segregation of inventory including quarantine, and advanced control of inventory status.

Increase quality of material handling with Radio Frequency (RF) support:

- Support material handling within the warehouse with browser-based mobile handheld RF-devices.
- Create mobile handheld device menus from within Microsoft Dynamics AX including creation of new menus for each user or user groups, change layout and colors, and error log and actions.



Use warehouse operation in manufacturing organizations:

Raw material picking and report-as-finished support.

Additional capabilities:

- Manage quality with blocking, support of (non-) destructive tests, and workflow integration.
- Enhanced reservation hierarchy including full serial and batch number support.
- Send Advanced Shipping Notices to customers and manage docks with appointment scheduling.
- Use reports to manage work including work activity and performance.
- Print document including support of creation of labels (zebra printers using ZPL code).

Transportation Management

Transportation Management introduces global enterprise transportation planning and execution capabilities.

Manufacturing, distribution and retail companies will benefit from a Transportation Management System (TMS) that flexibly supports changing and growing business demands. TMS helps our customers deliver the right customer experience – at the right price – to meet and exceed customer expectations.

Business and IT users will gain visibility and control via a user-configurable rating structure.

- Easily configurable set up.
- Intuitive transportation planning:
 - Inbound/outbound shipments.
 - Multi-shipment loads.
 - Shipment consolidation.
 - · Load building.
- Schedule and manage appointments:
 - Driver check-in/check-out history.
 - Driver log management.
- Shop rates based on:
 - Customer constraints.
 - Fuel charges.
 - Toll charges.
 - Multi-mode and multi-segment planning and execution.
- Route Management.
- Automated and manual freight reconciliation.

Demand Forecasting

Demand Forecasting is a lightweight, yet powerful demand forecasting tool that enables organizations to forecast demand based on historical data using Microsoft SQL Server forecasting algorithms, adjust the forecasted demand using the familiar environment of Microsoft Excel, and import the values into Microsoft Dynamics AX forecast models.

Demand Forecasting will help organization improve the accuracy of forecasts and therefore improve product availability, and minimize inventory costs.

- Forecast demand with statistical baseline forecast generation based on historical data. This includes the ability to exclude outliers from the forecast to improve accuracy. Forecast generation uses algorithms from Microsoft SQL Server Analysis Services. Algorithms include the ARTXP algorithm (optimized for predicting the next likely value in a series) and the ARIMA algorithm (to improve accuracy for long-term prediction).
- Support an iterative forecasting process with baseline forecast visualization and editing using the extended capabilities of Excel and SharePoint. Import the edited forecast back into Microsoft Dynamics AX.
- Create forecasts per product family and choose desired inventory dimensions to include in the forecast.
- Forecast accurately by monitoring forecast accuracy KPIs.



Product Change Management

Effectively manage product changes through a formal product changes methodology.

With the new functionality you'll be able to have a defined process to initiate, document, approve and release changes to product during the planning and production cycles.

- Create a product change case.
- Associate artifacts to the product change case:
 - Products.
 - Released products.
 - · Bills of materials.
 - Formulas.
 - · Routes.
- Identify impacted artifacts and add them to the product change case.
- Add comments to the product change case log.
- View relevant product change cases.
- Validate the completeness and consistency of the product change case.
- Manage the coordinated release of product changes:
 - Expire old BOM versions, formula versions and route versions
 - Approve new BOMs, formulas and routes
 - Approve and activate new BOM versions, formula versions and route versions

Serial Number Tracking Enhancements for Service and Warranty Scenarios

Serialized items are now supported in the sales and return processes without the need for tracking serial numbers through inventory.

When selling serialized items, companies capture serial numbers when preparing the packing slip and the invoice, or at the retail POS. In case of returns or warranty claims, companies use the standard item tracing functionality to find the order history. When receiving returned items or when issuing a credit note, serial numbers can also be captured.

- Serial number tracking on packing slip, invoice, return orders and credit notes.
- Traceability to sales orders and return orders.
- No additional inventory transactions because of serial numbers.
- No on-hand tracking per serial number.
- Scanner friendly user interface.
- · Retail POS support.

Trade Allowance Management

Offer customers pay-for-performance monetary rewards for achieving volume and behavioral goals with sales promotion programs. The trade allowance management capabilities are designed for organizations utilizing end-to-end promote-to-profit processes, starting from promotion fund budgeting and allocation, allowance contract setup, claims creation

- Optimize marketing promotion funds planning by creating and allocating promotion funds across multiple customer groups (hierarchies), products, and trade allowance agreements.
- Flexibly accommodate diverse promotional contracts through three different allowance types (i.e. bill backs, off invoice discounts, and lump sums). Promotions can be based on tiered amount- or quantity-targets periodic accumulation method, or per invoice.
- Improve control over trade allowance contracts by supporting the approval process with workflow.



and processing, payment processing and ending with promotion effectiveness analysis.

Trade Allowance Management will help organizations optimize utilization of marketing promotion funds and reduce the administrative time and effort.

- Simplify claim processing through automatic creation and accrual of claims and the Bill-back Workbench.
- Settle payments through integration with accounts receivables module and process.
- Manage and settle customer invoice short pays in deduction workbench.
- Improve promotion programs' future effectiveness by analyzing fund details and actual cost reports.
- Have a quantified basis for ongoing and future negotiations on promotions with the customers as based on actual versus planned quantity and sales graphs. This module includes a new Trade Allowance Management cube.

Vendor Rebate Management

Automate administration, tracking and claiming process of vendor rebates.

 Reduce administrative burden and errors associated with promotion performance monitoring and claim processing and improve cash flow forecasts through accruing for future receivables. Have a quantified basis for ongoing and future negotiations on rebates with the vendor.

- Accommodate different types of vendor promotion programs and rebate conditions by registering details of the negotiated rebate agreements with individual vendors or groups of vendors as based on tiered amountor quantity-targets, periodic accumulation method or per invoice, for individual products or groups of products.
- Improve control over vendor rebate contracts by including them into workflow approval process.
- Speed up rebate claims collection by automatically passing them as posted vendor invoices (credits) to standard A/P processing.
- Improve analytical overview of the vendor rebates by using the enhanced purchase cube.

Broker and Royalty Contract Management

Manage payment of fees to brokers for the service of facilitating sales with broker contract management. Control usagebased payments for the right to the ongoing use of an asset or an intellectual property with royalty management. This module will reduce the administrative burden of managing royalties and broker payments.

- Accommodate diverse broker contracts by registering details of the negotiated agreements with individual vendors, customers or groups of customers, based on tiered amount- or quantity-targets.
- Allow for flexible claim approval and differential amounts handling.
- Incur the broker fee yourself or pass it on to the customer.
- Improve cash flow accuracy through accruing broker payments as future liabilities.
- Accommodate diverse royalty contracts by registering details of the negotiated agreements with individual vendors, based on tiered amountor quantity-accumulation, category-based item selection, and royalty amount definitions including fixed, percentage, and amount per unit.
- Automate vendor invoice posting for royalty amounts.



eProcurement

Purchasing agents now have greater flexibility to configure corresponding rules and details to support solicitation management, including control over response types such as sealed and open type bids. With improved bid scoring and evaluation the purchasing agents can establish tabulation criteria with different award methodologies.

- Improve decision-making by defining evaluation criteria upfront and improve management of Request for Information (RFIs), Request for Proposal (RFPs) and Request for Quote (RFQ) from solicitation to award.
- Improve the vendor/government contractor experience and help vendors
 operate more efficiently by providing the ability to view and respond to
 open RFQs, allowing the proposal of item or services substitutes or no bid,
 and providing visibility into the status and results of a solicitation (for Public
 Sector). This includes a publicly available vendor portal and open bidding.
- Increase sourcing efficiencies through well-defined scoring criteria and rank vendor response based on multiple criteria.
- Manage solicitations including specification of solicitation types, methods, scoring criteria, and track and communicate changes to the RFQ. Utilize sealed bid methodology on RFQs and provide questionnaires to qualify vendors to bid on specific items or services.
- Improved the user experience of the Vendor self-service portal.
- Bid scoring, evaluation and ranking based on user-defined evaluation criteria.

Microsoft Dynamics CRM Integration, Project Client Integration and Visual Scheduling

Project pursuit and delivery teams will now have the ability to work together in sync across Microsoft Dynamics products (CRM and AX) when outlining project scope, estimating costs and fees, producing quotations, and tracking progress in project execution.

Project managers can leverage past and best-practice plans to rapidly detail out new projects in their familiar Microsoft Project, refining timelines and adjusting resource requirements. Plans may then be synchronized into Microsoft Dynamics AX work breakdown structures for ongoing revision and update.

Resource managers can easily find available resources from across the entire firm with the right competencies, certifications and other requirements and schedule them to the right projects using graphical and intuitive availability maps.

Taken together, new capabilities in Microsoft Dynamics AX 2012 R3 make it easier for firms to respond quickly to client project needs with the right people at the right time for the right price, without rebuilding the wheel every time and without incurring as much risk.

Interconnect teams:

 Microsoft Dynamics CRM and AX integration for synchronized costing, pricing and delivery team visibility.

Improve process flow:

- Manage opportunities through sales and marketing by collecting contacts, identifying stakeholders, and sketching requirements.
- Accelerate project initiation using the new work breakdown structure (WBS) template.
- Manage project execution through review and approval workflows.
- Simplify project billing with automation of intercompany invoicing for borrowed/loaned resources.

Balance resources across projects/organizations:

- Utilize built-in integration to do complex planning in Microsoft Project client and schedule resources visually in Microsoft Dynamics AX.
- Make better project staffing decisions with enhanced views into resource availability, skills, and costs across legal entities and divisions.
- Increase collaboration.
- Synchronize project information into Microsoft Office 365 for broader team collaboration and sharing.
- Submit time, expense, and approvals from various mobile devices while out of the office and on the road.
- Enhance business insights accelerate decisions with role-specific project plan, cost, and effort tracking views.
- Improve views into project and portfolio status with new Power BI data and project management KPIs (such as planned versus actual costs and earned value).



Modern Point of Sale* (POS)

Connected customers live in a connected world, and are well informed when making a purchase - before they even walk in the store.

Microsoft Dynamics AX 2012 R3 gives customers' purchasing intelligence to employees when they need it. And by having access to consolidated customer intelligence at the POS, employees can better serve customers.

The modern POS includes the basics around tender/transaction, but now also extends into a rich clienteling or assisted sales offering, as well as back office capabilities at the employees fingertips. The power of this new modern POS is that it becomes much more than a Point of Sale experience – it is a customer engagement dashboard!

For example, new assisted sales solutions will consolidate customers' purchase intelligence – such as sales history, transaction details, and wish lists - and provide this to the sales associates to better guide their customers.

Additionally, retailers can customize look and feel (font, color, graphics) and optimize by region, by store, by role, and even by user

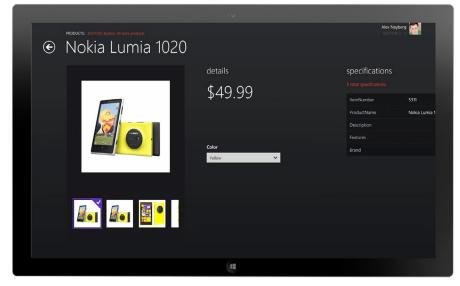
For example, the cashier may have access to specific capabilities beyond tender, such as adding a loyalty card and looking up inventory, while a store manager may have access to store reports and real-time sales data.

These capabilities are based on a commitment to provide immersive, flexible, modern and mobile experiences for retailers and their consumers virtually anywhere, anytime, and on any device.

- Empower sales associates in store with a Modern Point of Sale supporting the basics including tender/transaction, but also extending into rich clienteling, real-time inventory look-up, as well as back office capabilities at the employee's fingertips.
- Engage with customers through assisted sales using rich customer purchase intelligence regardless of what channel they shop in.
- Provide both customers and employees immersive and richer experiences through role-tailored POS UI, support of multiple platforms (Windows iOS, Android), multiple devices (e.g. tablets and phones), as well as integration to peripherals (e.g. receipt printers, scanners)
- Empower employees through highly flexible and rich inventory management, daily operations and KPI reporting and consolidated customer data view such as RFM (Recency, Frequency and Monetary) score.







Multiple screens in Modern POS

^{*} Modern POS will be available after General Availability of Microsoft Dynamics AX 2012 R3



eCommerce and Social

eCommerce and Social Media integration provides retailers with an opportunity to engage and connect with their customers on their terms, while offering an integrated and end-to-end omni-channel shopping experience.

Enhancements let retailers extend services to their customers, for example, allowing them to connect with friends and followers who also share purchasing intentions and preferences on Facebook, Twitter, and Pinterest.

By deploying these types of connected solutions, retailers will be able to maximize their investments by avoiding extensive customizations and provide customers with a superior shopping experience.

- Promote campaigns and publish through Facebook, Twitter, and Pinterest through a pre-configured integration.
- Publish products and services to third party market places including eBay and Amazon through an SDK.
- Build campaigns once and distribute through multiple channels (above) and provide flexible redemption capabilities (e.g. through mobile).
- Improve customer engagement including: customer specific pricing, omni-channel wish list (e.g. customer can build and save wish lists online, which can be (with customer's consent) accessed in store through the modern POS by the sales associate). Customer management through gift card support as well as global loyalty support are also enhanced in this release.
- Deliver superior out-of-box shopping experiences including multilanguage storefront, flexibility in delivery options (e.g. splitting orders, buy online pick-up in store).



Online storefront in Microsoft Dynamics AX 2012 R3



Commerce Excellence

Enrichments of specific retail scenarios include pricing and promotions, assortment and catalog, BI and reporting, loyalty, gift cards and seasonality and markdowns enhancements.

Kitting is also being introduced in this release. Kitting entails grouping individual items into a "Kit" that can then be sold in various channels.

Catalog:

- Define and manage mail-order catalogs including the products associated to the catalog, specific catalog pricing, catalog related call scripts and ability to link a catalog to one or more targeted mailing lists.
- Gain insight into promotional response rate tracking by creating specific key codes or source codes tied to the catalog which are linked to the sale in order entry.
- Define an ongoing product club, continuity program (i.e. book of the month) and the schedule of products to be sent to customers who purchase into this program.

Kitting:

• Specify kit price different than component prices, substitute kit components, assemble and disassemble kits, sell across any channel

Pricing/Promotions:

- Offer threshold discounts: Discounts based on the total transaction value (e.g. \$10 off when you buy \$100 or more)
- Set category pricing rules: Markup or margin pricing for categories of products
- Mix and match discount participate in retail discount concurrency rules
- Manage pricing/discounts for catalogs and catalog products, and affiliations
- Record all discounts across all channels and report on them

Lovalty:

- Run a global loyalty program
- Configure various loyalty programs, loyalty tiers and loyalty tier rules
- Manually set a loyalty card tier for a period of time, associate discounts to loyalty programs and loyalty tiers
- Issue loyalty card and view loyalty card details in any channel as well as option of accrual/redemption of loyalty points in any channel

Gift Cards:

- Manage gift cards seamlessly regardless of channel: for example by selling and accepting gift cards in retail channels that span legal entities (e.g. eCommerce/web store front and physical store)
- Support gift cards across all channels POS, mobile clients, eCommerce, call centers

Other Omni-Channel capabilities:

- Define coupons as single use or multi-use and specific to products of promotions
- Manage fraud prevention across channel (e.g. ability to flag orders as potential fraud online or at POS)



Retail Enterprise Manageability

In order to support deployments in retail enterprise organizations, the following support is planned: setup and upgrade of retail stores per store in order to phase and align deployment with business requirements, large scale deployment using Microsoft System Center Configuration Manager, monitoring and diagnostics using System Center Operations Management.

- Install, set-up and configure new stores more easily.
- Use SCCM (System Center Configuration Manager) to manage large scale deployments.
- Use SCOM (System Center Operations Manager) to run monitoring and diagnostics.
- Expand rapidly through improved performance and scalability, including globalization and localization enhancements.

Call Center Sales

The Microsoft Dynamics AX 2012 R3 release continues to deliver on our omnichannel solution for retailers including call center as a new channel.

This channel can be used for order entry, order processing and order fulfillment.

Retailers can offer mail order catalogs to their customers and manage this new streamlined channel. Call Center provides retailers the choice and flexibility of offering call center sales and order management with the same end-to-end omni-channel capabilities as in other channels. This includes:

- End-to-end customer service, fast customer keyword search, fast order entry and assisted sale, enhanced order fulfillment.
- · Integrated pricing, promotions/discounts.
- Installment billing (e.g. ability to define a billing schedule for example with 4 easy payments).
- Order hold management (e.g. ability to put orders on hold and review and cancel/release as needed).
- Upsell/cross-sell definition (e.g. pop ups during call center order entry to provide suggestions of additional products to be sold).
- Ability to define call center scripting at the start of order, end of order, and by product or cross-sell/upsell and catalog specific scripts.
- Detailed order and order line status including partially shipped and backordered information.
- RFM (Recency, Frequency and Monetary) scoring of customers.
- Out of Balance parameters and hold capabilities for managing under and over payments.
- Manage mail-order catalogs, for example the ability to sell or return products that are not assorted to the store, but may be in a specific catalog.

Order Entry Enhancements for High-volume (Consumer) Transactions

Enhances order entry capabilities by a single, more accessible view into inventory, product promotions, and customer activity.

These build on the existing order processing functionality in Microsoft Dynamics AX 2012 R2, and introduce new capabilities to manage B2C orders.

Streamlines order entry by enhancing Microsoft Dynamics AX with:

- Product keyword search.
- Discount and charge overrides.
- Multiple payment types including gift cards and coupons.
- Postage and handling calculation.
- Up-sell/cross-sell alerts.
- Simplified sales order completion with order summary.
- Detailed order status and notifications.
- Configurable fraud rules.
- Manual or automatic set up of order holds and processing.



Human Resources

Enhanced HR capabilities include HR and Payroll analytics, position forecast, and streamlined regulatory reporting, benefit updates and U.S. payroll/tax setup.

- Enhancements to forecast position functionality includes detailed compensation estimates for new positions and support for what if scenarios.
- HR and Payroll Analysis Cubes enables you to use tools such as Microsoft Excel, SQL Server Analysis Services, and Power View to create custom reports. Power View provides quick and easy visualization of your data (total headcount, and turnover percentages for the month, year, or quarter.
- Streamline U.S. regulatory reporting with new preparation reports: EEO-4, EEO-5, VETS100, 940, 941, Unemployment, OSHA300, OSHA300A, OSHA30 and new hire.
- Benefits processing has been enhanced for Benefit Managers to expire/ change the enrollments for multiple workers.
- More easily track and control hires, terminations, transfers and promotions by using employee-based personnel actions and workflow.
- Simplify U.S. tax setup with mass updates of employee taxes. Streamline reporting with new preparation reports for state quarterly wage and Payroll Unemployment Wage and Tax.

Budget Planning

Budget managers can now benefit from enhanced budget planning and allocation rules.

- You can create a budget plan worksheet template for Microsoft Excel by using a wizard in Microsoft Dynamics AX.
- Offers summary/total dimensions when you analyze and update budget plans by using multiple scenarios. Automatically route budget plans together with worksheets, justifications, and attachments for reviews and approvals.
- Enable budget allocation based on ledger allocation-based rules.

Management Reporter

Global organizations can have complex consolidation scenarios. Often legal entities that need to be consolidated have different chart of accounts and fiscal periods. The consolidation process in Management Reporter, which is now part of the Microsoft Dynamics AX installation, supports these scenarios without the need for an elimination company.

- · Supports currency translation.
- View reports in any currency.
- Provide easy access to transaction details with drill back to Microsoft Dynamics AX from the Web Viewer



Master Data Management (MDM)

Manage master data across multiple Microsoft Dynamics AX instances.

Master Data Management is built on top of Microsoft SQL 2012 Master Data Services (MDS) to simplify full, as well as selective, data synchronization and enables central conflict management to help build trust in your data.

Master Data Management helps to increase the consistency of your data across your organization and deployments. It helps maintain reliable data for key business entities and enables data integrity for unified data governance.

Master Data Management is built on top of Microsoft SQL 2012 Master Data Services (MDS) to simplify full as well as selective data synchronization and enables central conflict management to help build trust in your data.

Master Data Management helps to increase the consistency of your data across your organization and deployments. It helps maintain reliable data for key business entities and enables data integrity for unified data governance.

- Built on Microsoft SQL Server 2012 Master Data Services (MDS) and the Microsoft Dynamics Data Import/Export Framework (DIXF) MDM manages master data across multiple Microsoft Dynamics AX instances.
- Manage the following Microsoft Dynamics AX entities across instances: customer, vendor, employee, global address book, and product.
- Supports either single master (one point of change) or multi-master scenarios (distributed) to meet the modification and management needs of your organization.
- Full and incremental change synchronization helps maintain consistency across instances over time.
- Automatic conflict detection in the central data store and manual data conflict resolution by trusted business users or data stewards helps ensure data reliability across the enterprise.
- Speeds the review and editing of conflicts through the Microsoft Excel MDS add-in that provides a familiar, easy-to-use interface.
- Easily manage the frequency and depth of synchronization to continuously adjust to the needs of the business.
- Master data entities can be modified or additional entities can be added.
- MDM supports integration and data synchronization with 3rd party systems through adapter development and customization.

Compiler

New compiler reduces compilation times up to 80%.

- Moves the compile operations of all X++ source code and metadata validation from the Client to the AOS server.
- Compiling utilizes parallel computing and multi-threading.

Modern Apps & Mobility Windows 8 Applications Acro



Modern App Framework

Microsoft provides technology to develop, manage, distribute, and use modern apps designed for the device-first and cloud-connected world, with the potential to transform today's business processes and customer interactions.

Connect Microsoft's or custom-built modern apps easily and securely from outside the organization's firewall with Microsoft Dynamics AX. The framework uses the cloud and Microsoft Dynamics AX's web services framework for communication between the modern apps on the mobile devices and Microsoft Dynamics AX.

- Communicate data to and from Microsoft Dynamics AX 2012 using an Application Integration Framework service.
- Connect devices from outside the organization's firewall using the Microsoft Azure Service Bus.
- Secure communication using Microsoft Active Directory Federation Services as identity provider.
- Develop modern apps for specific business scenarios using guidance (SDK), components and technology provided by Microsoft.
- Distribute Microsoft's apps to enterprise users through the Windows Store and custom-built apps through your enterprise's private market place using Windows Intune.

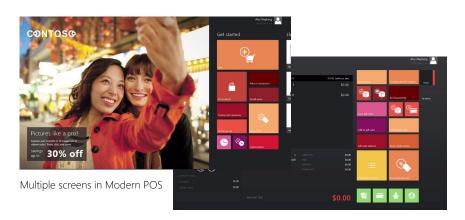
Modern Point of Sale* (POS)

The Modern POS will consolidate customers' purchase intelligence – such as sales history, transaction details, and wish list - and provide the right information at the right time for sales associates to better guide and recommend their customers based on purchase patterns and preferences.



Multiple screens in Modern POS

- Empower sales associates in the store with a Modern Point of Sale supporting the basics including tender/transaction, but also extends into a rich clienteling, as well as back office capabilities at your fingertips.
- Engage with your customers through assisted sales using rich customer purchase intelligence regardless of what channel they shop in.
- Provide both customers and employees immersive and richer experiences through modern POS, multiple platforms (Windows, Windows Phone, iOS, Android), multiple form factors and peripherals.
- Empower employees through highly flexible and rich inventory management, daily operations and KPI reporting and consolidated customer data view such as RFM (Recency, Frequency and Monetary) score.



^{*} Modern POS will be available after General Availability of Microsoft Dynamics AX 2012 R3

Modern Apps & Mobility Windows 8 Applications Across Devices

Microsoft Dynamics AX 2012 Timesheets

Create, manage, and submit project timesheets in Microsoft Dynamics AX 2012.

With Timesheets, capture project time "on-the-go", simplifying this task while providing organizations the opportunity to improve working capital through decreased billing cycle times.

- Improve people productivity with a modern UI that works across desktop, laptop, and tablet based on Windows 8.
- · View the list of timesheets.
- Create and submit a new timesheet for approval.
- · View and modify timesheets.
- Simplify distribution within your global organization with availability in 38 languages in the Windows Store.
- Available on or off corporate network.



Entering timesheets in the Microsoft Dynamics AX 2012 Time and Expense mobile phone app

Microsoft Dynamics AX 2012 Expenses

Create, manage, and submit expense reports in Microsoft Dynamics AX 2012. Help people to both capture and reconcile expenses while traveling, reducing time and effort. Implement organizations' expense policies more seamlessly.

- Improve people productivity with a modern UI that works across desktop, laptop, and tablet based on Windows 8.
- View the list of expense reports or unreconciled expenses.
- · Create, view, and submit expense reports.
- Add/edit expenses and receipts to expense reports.
- Simplify distribution within your global organization with availability in 38 languages in the Windows Store.
- Available on or off corporate network.



Start screen in Microsoft Dynamics AX 2012 Approvals modern app

Microsoft Dynamics AX 2012 Approvals

Manage approvals in conjunction with Microsoft Dynamics AX 2012.

Enable approvers who are on-the-go to quickly view and take action on business requests such as budget, time sheets, expense reports, and purchase requisitions.

- Improve people productivity with a modern UI that works across desktop, laptop, and tablet based on Windows 8.
- Approve any approval type workflow in Microsoft Dynamics AX 2012.
- View the list of items that need your review and recent actions you have taken.
- Reach out to your coworkers directly from the app by using Microsoft Lync or email to clarify approval items.
- Gain insights through attached reports and information that help approvers make the right decision.
- Simplify distribution within your global organization with availability in 38 languages in the Windows Store.
- Available on or off corporate network.

Modern Apps & Mobility Windows 8 Applications Across Devices

Microsoft Dynamics Business Analyzer

Help accelerate your business with actionable and engaging business insights. Tailored for specific roles Microsoft Dynamics Business Analyzer provides preconfigured business insights and a user experience that can be personalized to fit your needs. Whether you are in the office or on the go you can discover and interact with your favorite charts and financial reports or collaborate and share insights to help drive decisions more quickly.



Start screen of Microsoft Dynamics Business Analyzer

- Get insights fast with an interactive and engaging user experience that works across desktop, laptop, and tablet based on Windows 8. Includes Pre-defined roles for Chief Financial Officer and Practice Manager.
- Personalize to your needs and select charts, financial reports and KPIs that are relevant to you.
- Interact with data, view by periods or dimensions and drill down into transaction details.
- Collaborate with others through real-time communication using the Microsoft Lync modern app or by using the Windows 8 share charm to share a snapshot.
- Simplify distribution within your organization with availability in US Windows Store (English only).

Microsoft Dynamics AX Shop Floor

Provide shop floor workers with an overview of the production jobs that need attention. Quickly perform daily production tasks such starting jobs, reporting jobs as finished, and registering breaks and absence.

- Get insight into the status and details of production jobs with a modern user experience based on Windows 8.
- Start production jobs, report jobs as finished, and enter feedback.
- Read files that are attached to production jobs.
- Clock in and out automatically when you start or exit the app.
- Register breaks, indirect activities, and absence.
- Simplify distribution within your organization with availability in US Windows Store (English only).



Overview of production jobs in Microsoft Dynamics AX Shop floor modern app

Modern Apps & Mobility Mobile Phone Applications

Microsoft Dynamics AX Time and Expense

Help people on-the-go be more productive by creating and submitting timesheets and expenses using a mobile phone.

- · Create and submit timesheets.
- View project details with calendar and list view of associated projects.
- Capture expense transactions and receipts using a mobile phone.
- Make a photo of the physical receipt and attach this to the expense transaction.
- The expense will be synchronized and stored in Microsoft Dynamics AX 2012 as an unreconciled entry. These entries can easily be added to expense reports.
- Simplify distribution within your global organization with availability in 38 languages in the Windows Store and 1 language in Android and IPhone Stores (English only).

Microsoft Dynamics AX Paystub

View your paystub pulling directly from the U.S. payroll solution. Mobile Paystubs for Windows Phone 8 gives you access to historical paystubs anytime, anywhere.

- View 13 months of paystub history and direct deposit amounts for each paystub. Time off accrual balances are available with each paystub including: accrued, used and remaining balances.
- View details for each of 8 pivots of the paystub details.
- Simplify distribution within your organization with availability in US Windows (Phone) Store (English only).

Microsoft Dynamics Lifecycle Services (LCS)

Microsoft Dynamics Lifecycle Services helps organizations improve the predictability and quality of their Microsoft Dynamics AX implementations by simplifying and standardizing the implementation process. In addition, proactive monitoring of the system can reduce system downtime.

Lifecycle Services is a Microsoft Azure-based collaboration portal that provides a unifying, collaborative environment along with a set of regularly updated services that help manage the application lifecycle of your Microsoft Dynamics AX 2012 implementations.

It is a collaborative workspace that can be used by both customers and partners, separately and together, to enable closer collaboration, and speed.

- Design, develop, and operate your application with the following services available: Business process modeler, License sizing estimator, Usage profiler, Hardware sizing, Customization analysis, Upgrade analysis, System diagnostics, Issue search, and Cloud-powered support. New updates, expanded functionality and new services are continuously being developed and deployed.
- Facilitate easy and fast communication and information sharing across the team using the customer-managed, security-enhanced collaboration workspace.
- Supports project management using Sure Step or other methodologies to help your implementation to be successful.
- Manage your project with a project-specific dashboard to highlight the project's current status to more easily identify, understand and address any problems and issues.



Project Start screen in Microsoft Dynamics Lifecycle Services

Business Process Modeler

Provide dynamic business process documentation of your implementation by using the Business process modeler to create, view, and modify business-process hierarchies and flowcharts.

Business process modeler helps you do a gap-fit analysis between your business processes and Microsoft Dynamics AX using a cross-industry processes taxonomy from American Productivity & Quality Center (APOC).

Task Recorder helps you easily capture business processes, generate documentation and automatically create business process flow charts in LCS.

- Create, view and modify business-process hierarchies and flowcharts for Microsoft Dynamics AX 2012 R2 and higher. View and activate previous versions of business processes.
- Describe your specific business processes using the flowcharts.
- Perform gap-fit analysis between the business needs and the default process in Microsoft Dynamics AX.
- Export the output of the gap-fit analysis directly to Microsoft Visual Studio Team Foundation Server on-line to help developers track and manage the fit-gap requirements workloads.
- Task Recorder lets you quickly generate Microsoft Word documents, Microsoft Visio flowcharts and

customized videos to better enable user adoption, on-boarding training.

 View specific meta-data or click through to the specific Microsoft Dynamics AX screen directly from the process symbol in the flowchart.



Business Process Modeler in Microsoft Dynamics Lifecycle Services

License Sizing Estimator

License sizing estimator helps you estimate the configuration of the different types of Client Access Licenses that an organization will need. This services supports Microsoft Dynamics AX 2012 R2 and higher license sizing.

- Determine the estimated required mix of user licenses based on the roles and activities in your organization to help lower license acquisition costs.
- Model the effect of duty-level customization of roles on your license requirements.
- Provide the total number of Client Access Licenses (CALs) needed by type and level.

Customization Analysis

Customization analysis offers Microsoft Dynamics AX 2012 customers an automated tool that validates the customer's model files against Microsoft Dynamics AX best-practice rules.

It generates reports that list all identified issues as well as a developer report that can be loaded into the Microsoft Dynamics AX 2012 development environment.

- Uses a cloud-based rules engine to analyze code and identify potential best practice, performance and upgradeability issues.
- Generates actionable reports in Microsoft Excel and HTML that can be imported into MorphX IDE as actionable to-dos for developers to speed customization development.

Upgrade Analysis

Upgrade analysis helps users plan their upgrade to Microsoft Dynamics AX 2012 from previous versions.

Analyzing data about your current environment helps to prepare the data and estimate the scale of the upgrade project.

- Analyzes your current implementation to help estimate the scale of upgrading from Microsoft Dynamics AX 4.0 or Microsoft Dynamics AX 2009 to Microsoft Dynamics AX 2012.
- Rapid Data Collector (RDC) tool automatically collects metadata about your environment to aid the analysis.
- Service generates a Microsoft Excel file that identifies code, data and security updates to identify design issues to address as part of your upgrade.

Usage Profiler and Infrastructure Estimation

Usage profiler helps you estimate your projected or current usage of a Microsoft Dynamics AX 2012 implementation.

You can use the data from the Usage profiler for a variety of purposes, such as estimating hardware sizing and helping to troubleshoot issues with support.

- Model user and batch loads to gain a better understanding of the current or projected loads of your Microsoft Dynamics AX 2012 implementation.
- Enter data directly, import process data from Business Process Modeler, or use the Microsoft Excel template to upload the data.
- Generate a detailed summary of usage characteristics including system configuration, transaction volumes and scheduling information.
- See a graphical representation of your organization's peak load profile
- Analyze load volumes to reschedule tasks to mitigate peak loads or to

Hardware sizing provides the estimated hardware needed based on the projected usage profile.

- accommodate peak loads in your hardware sizing estimates.
- Produce estimates of different server licenses necessary for your Microsoft Dynamics AX 2012 environment to help identify a starting point for infrastructure sizing.
- Data from the Usage Profiler is used in the project summary report that project stakeholders can use to gain a better understanding when planning an implementation.

System Diagnostics

System diagnostic service helps IT administrators monitor and understand the health of one or more Microsoft Dynamics AX environments.

It is a cloud-based tool that has a locally-installed component that can be configured to automatically and periodically gather system information about your implementation. The information is run against built-in rules to gauge performance and identify potential issues.

- Monitor and understand the health of one or more Microsoft Dynamics AX 2012 environments.
- Set and track rules run against data collected across your Microsoft Dynamics AX 2012 environment and view the results in a simple, easy to navigate graphical dashboard with quick access to outstanding issues.
- Generate reports to provide monitoring and actionable corrective action summaries to help you be proactive in the management of your implementations.

Issue Search

System diagnostic service helps IT Issue search is a search engine that you can use to quickly search for KB articles, hotfixes, fixes in-progress, and workarounds for reported issues in Microsoft Dynamics AX 2012 implementations.

View the status of reported issues, download hotfixes and see which code objects are affected before installing to understand the impact to your environment.

- Search engine that searches across KB articles, hotfixes, fixes in-progress, and workarounds to help you resolve issues in your Microsoft Dynamics AX 2012 environment.
- Search across reported, in-progress and fixed issues to quickly find solutions to help keep your implementation running efficiently.
- Download hotfixes, see which code objects and the specific lines of code affected by the hotfix to analyze the impact of the changes to your environment.
- Get notifications for issue status changes, and new fixes for AX functional areas to help you proactively manage your implementation.

Cloud-Powered Support

Customer driven, cloud powered support process to prevent and resolve incidents.

Collaborative support process simplifies self-diagnosis, communication between customer and Microsoft, and replication of customer's environment and issue in Microsoft datacenter.

- · Simplify issue submission process.
- Replicate your system configuration and issue automatically in a VM in Microsoft's data center to simplify and unify the communication.
- Share VM between the user and Microsoft until the issue has been resolved.

Microsoft Azure Deployment Portal for Microsoft Dynamics AX 2012 R3

The Portal helps you simplify deployment of Microsoft Dynamics AX 2012 R3 on Microsoft Azure by automating deployment of the server set.

- Simplify and automate deployment of multiple topologies including demo, development/test, and Production* of Microsoft Dynamics AX 2012 on Microsoft Azure.**
- Provide for a disaster recovery scenario using Microsoft Azure**
- Benefit from Infrastructure as a Service by manually deploying Microsoft Dynamics AX 2012 R3 on Microsoft Azure.



Microsoft Azure Deployment Portal in Microsoft Dynamics Lifecycle Services

Planned to be released in June 2014



Microsoft Azure Deployment Portal for Microsoft Dynamics AX 2012 R3

Utilize the power of Elastic IT to scale up or scale down your infrastructure to meet the needs of your business.

Utilize the experience, global footprint, security and reliability that every enterprise should demand of cloud solutions to extend your IT operations.

- Utilize laaS with the certification of Microsoft Dynamics AX 2012 R3 to run on Azure
- Easily deploy any number of development or test environments your organization needs.
- Quickly deploy a production environment in a matter of hours instead of weeks.
- Simplify and automate the deployment of Microsoft Dynamics AX 2012
 R3 through the Lifecycle Services Azure deployment portal
- Scale your capacity on a global-based platform with a diversity of cloud workloads to match the needs of your businesses.

Disaster Recovery Powered by Microsoft Azure (coming soon)

Utilize the power, scalability and flexibility of the cloud for disaster recovery of your Microsoft Dynamics AX 2012 R3 implementations.

 Easily deploy a disaster recovery environment in Microsoft Azure that you can connect to your Microsoft Dynamics AX 2012 R3 environment whether on-prem or in the cloud.

Microsoft Dynamics Lifecycle Services on Microsoft Azure

Lifecycle Services is a Microsoft Azurebased collaboration portal that provides a unifying, collaborative environment along with a set of regularly updated services that help manage the application lifecycle of your Microsoft Dynamics AX 2012 implementations.

- Provide global teams easy, security-enhanced access to a single repository with a view of the implementation project and related documentation.
- Enable closer collaboration and speed via a workspace in the cloud that can be used by both customers and partners, separately and together
- Simplify and accelerate incident resolution with user-driven, cloudpowered support. This collaborative support process simplifies selfdiagnosis, communication between you and Microsoft, and replication of your environment and issue in a Microsoft datacenter.
- Use the latest services and guidance from Microsoft to monitor your system's health, evaluate your customizations, or resolve issues with regular, frequent updates to the cloud services.

Modern Apps and Mobility with Microsoft Azure App Services

Connect Microsoft's or custom-built modern apps easily and securely from outside the organization's firewall with Microsoft Dynamics AX. The framework uses the cloud and Microsoft Dynamics AX's web services framework for communication between the modern apps on the mobile devices and Microsoft Dynamics AX.

- Connect devices from outside the organization's firewall using the Windows Azure Service Bus
- Secure data communication using Microsoft Active Directory Federation Services as identity provider.
- Distribute Microsoft's apps to enterprise users through the Windows Store and custom-built apps through your enterprise's private market place using Windows Intune.

Microsoft Dynamics AX Cumulative Updates

Keep your Microsoft Dynamics AX 2012 implementations current using the new update experience.

- Discover and download the latest CUs from Lifecycle Services.
- Easily identify the updates in the CU that are relevant for your implementation.
- Get a visual insight into the impacted business processes in Lifecycle Services.
- Save time by using the auto-code merge capabilities.

Pervasive Interoperability

Drive innovation—today and tomorrow—by working with a standard Microsoft technology platform that simplifies deployment and lowers costs, giving you the power to drive your business forward. You can deploy in the way that works best for you—on-premises, in the cloud (through partners), or using a hybrid model—and make incremental changes as needed. With Microsoft Dynamics AX, you get a business solution from Microsoft that is backed by an ongoing commitment to research, development, and innovation.

Maximize your investments, lower TCO, and make additional productivity gains through Microsoft Dynamics AX 2012 interoperability with Microsoft business productivity solutions and the application platform, including the support for recently released Microsoft products:

- Microsoft Windows 8.1,
- Microsoft Windows Server 2012 R2
- Microsoft SQL Server 2014, Microsoft Internet Explorer 11
- Microsoft Azure (Infrastructure as a Service)**

For a full overview please see the <u>systems requirements document</u> (available May 1, 2014).

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Microsoft Dynamics AX 2012 R3 is pre-release software under development. All dates, features, and descriptions specified are preliminary, are based on current expectations, and are subject to change at any time without notice.

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