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Using this Guide

Use this guide to improve customers' understanding of how to license Microsoft Dynamics 365 for Operations on-premises, Enterprise (Microsoft Dynamics 365 for Operations on-premises). Microsoft Dynamics 365 for Operation on-premise is the newest version of Microsoft's current ERP on-premises product. Microsoft Dynamics 365 for Operations on-premises offers choices to license employees who need to use much of the rich functionality in the business application, and other users who consume and share information and complete small or targeted tasks in the application.

This document does not apply to Microsoft Dynamics NAV, Microsoft Dynamics GP, Microsoft Dynamics SL, Microsoft Dynamics AX 2012, Microsoft Dynamics CRM 2016, or prior versions of any of these products. This guide also does not apply to Microsoft Dynamics 365 cloud services, Microsoft Dynamic CRM Online, or Microsoft Dynamics AX cloud. This guide is not intended to influence the customer's purchase decisions on Microsoft Dynamics 365. The examples presented in this guide are illustrative. Microsoft reserves the right to review or update this document at any time without notice.

For help determining the right technology for any given organization, including the license requirements for a specific product or scenario, consult with the customer's Microsoft Dynamics Certified Partner or their Microsoft account team.

This guide does not supersede or replace any of the legal documentation covering use rights for Microsoft products. Specific product license terms are detailed in the Software License Terms (SLT) document, which is available on the Lifecycle Services (LCS) legal <u>website</u> and the Product Terms (PT) found on the Volume Licensing website.

How to License Microsoft Dynamics 365 for Operations on-premises

Microsoft Dynamics 365 for Operations on-premises utilizes a licensing model that is powerful, flexible, competitive, and optimized for Microsoft's Enterprise Agreement (EA). The EA offers the best value for organizations that want to buy online services and software licenses under one agreement. The EA offers large organizations the ability to license Microsoft online services and software licenses, over a three-year period, with volume discounted prices. Customer have access to up-to-date Microsoft online services with active subscription and rights to the latest versions of Microsoft licensed products when active on Software Assurance.

Microsoft Dynamics 365 for Operations on-premises is available through multiple licensing programs including EA and Dynamics Price List (DPL).

Basic Licensing Requirements

For software deployments, Microsoft Dynamics 365 for Operations on-premises is licensed under the familiar Server + Client Access License (CAL) model, which requires that the customer license the server(s) running the software as well as the users and/or devices that connect to the product.

Server Licenses

Before a customer runs any instance of the Microsoft Dynamics 365 for Operations on-premises software, they must obtain a Dynamics 365 for Operations Server license for each of their servers. For each Microsoft Dynamics 365 for Operations Server license the customer obtains, they may run, at any one time, one instance of the server software in one physical or virtual operating system environment (OSE) on the licensed server. A hardware partition or blade is considered to be a separate server. The server license includes one application object server. If customers want additional application object servers or

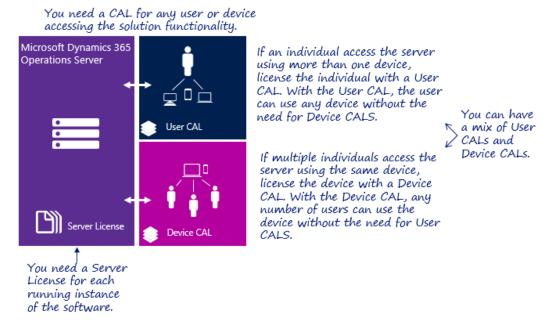
additional server instances, they may purchase additional Microsoft Dynamics 365 for Operations Server licenses.

Client Access Licenses

Microsoft Dynamics 365 for Operations on-premises customers must purchase CALs for users or devices accessing the Microsoft Dynamics 365 for Operations Server.

Microsoft Dynamics 365 for Operations on-premises offers a rich feature set supporting multi-tenant deployments. Users or devices accessing the server software on multi-tenant deployments need to purchase the Microsoft Dynamics 365 for Operations on-premises CALs. Server licenses with Software Assurance are required to receive the benefit of License Mobility for Software Assurance as described in the Product <u>Terms</u>.

Figure 1 – Server CAL Model



Reassigning CALs

Named CALs (either User or Device) cannot be shared. CALs can be reassigned only in specific cases as follows:

- Permanently reassigning a CAL from one user or device to another, due to permanent personnel or device replacement.
- Temporarily reassigning a CAL to a temporary worker while the assigned user is absent or to a temporary loaner device while an assigned device is out of order.

Licensing Requirements for Internal Users

Customers must purchase a CAL for their organization or their affiliates' employees and on-site agents, vendors or contractors who directly or indirectly access the Microsoft Dynamics 365 for Operations Server software, files, data content, or any Microsoft Dynamics 365 for Operations on-premises functionality.

"Microsoft Dynamics 365 for Operations on-premises functionality" is any service or feature of Microsoft Dynamics 365 for Operations Server software that allows a user to view, manipulate, input, query, or otherwise structure Live Data. "Live Data" is information that, via user action, dynamically writes to, reads from, or synchronizes with Microsoft Dynamics 365 for Operations Server software.

Internal users are required to have the appropriate CAL, regardless of their direct or indirect connection to the product. See more details about indirect access under the Multiplexing section.

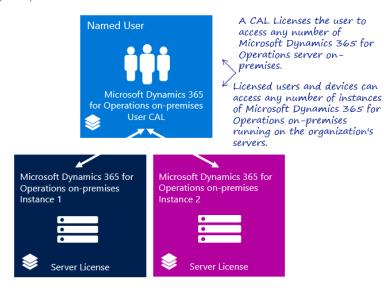
Dynamics 365 for Operations on-premises has two types of CALs:

- User CALs are assigned on a "named user" basis, meaning each user requires a separate CAL; User
 CALs cannot be shared, but an individual with a User CAL may access the service through multiple
 devices without need for separate Device CALs. Purchasing User CALs might make more sense if
 the organization's employees need to have roaming access to the corporate network using
 multiple devices, or from unknown devices, or if there are simply more users than devices in the
 organization.
- Device CALs grant access to the Microsoft Dynamics 365 for Operations Server from a device.
 Any user may access a licensed device without the need for a separate User CAL. The Device CAL has restricted functionalify but may make more economic and administrative sense if its organization has employees who share devices, such as for shift-based work.

A user or device licensed with a CAL may access any number of instances of Microsoft Dynamics 365 for Operations Server or earlier versions of the software running on the organization's servers.

Note: Since Microsoft Dynamics 365 for Operations on-premises may be licensed with a User or Device CAL, only the user or device requires a CAL but not both. If the user of a device is licensed with a CAL, then the device *does not* need a Device CAL. Likewise, if the device is licensed with a Device CAL, then the user *does not* need a CAL. Customers can mix both User and Device CALs.

Figure 4: Accessing multiple instances



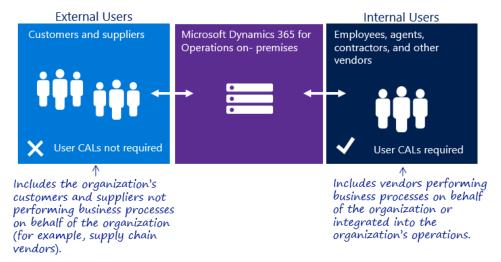
Licensing Requirements for External Users

External users are end customers and third-party users of the organization or its affiliates and do not require a CAL to access the Microsoft Dynamics 365 for Operations Server. External user access is included with the Microsoft Dynamics 365 for Operations Server.

External users do not extend to the customer or the customer's affiliate's contractors, vendors, or agents providing business processes on the customer's behalf or using Microsoft Dynamics 365 for Operations on-premises to manage any portion of their business. In this sense, the customer may not use Microsoft Dynamics 365 for Operations on-premises to provide business process outsourcing services to their clients.

External users include off-site vendors not on an employee-like relationship with the organization or its affiliates (e.g. IT help desk support vendors serving multiple customer organizations).

Figure 2: Internal vs. external users



Multiplexing

Multiplexing refers to the use of hardware or software that a customer uses to pool connections, reroute information, or reduce the number of devices or users that directly access or use Microsoft Dynamics 365 Operations Server. Multiplexing does <u>NOT</u> reduce the number of CALs of any type required to access the Microsoft Dynamics 365 Operations Server. Any user or device that accesses Microsoft Dynamics 365 Operations Server —whether directly or indirectly—must be properly licensed.

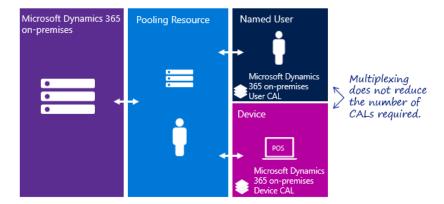
Microsoft Dynamics 365 for Operations on-premise CALs are required for users or devices that directly input, query, or view data from the Microsoft Dynamics 365 Operations Server. Similarity, Microsoft Dynamics 365 for Operations on-premises CALs are required for users or devices that input data into, query, or view data from Microsoft Dynamics 365 Operations Server through a pooling device. Pooled connections use a non-interactive user account in Microsoft Dynamics 365 that can access the system but only via the web service layer. Internal users and devices accessing Microsoft Dynamics 365 data indirectly through a portal or via an API to a separate software such Microsoft Outlook must also be properly licensed, regardless of if they are set up as a Dynamics 365 user in the server software. For example:

- Internal users and devices access Microsoft Dynamics 365 for Operations on-premises data indirectly through a third party application must still be properly licensed for Microsoft Dynamics 365 for Operations on-premise.
- Users or devices that access the software files, data, or content provided by the product that is made available through an automated process require Microsoft Dynamics 365 for Operations on-premise CALs.
- The number of tiers of hardware or software between the Microsoft Dynamics 365 Operations Server and the users or devices that ultimately use data, software, or functionality does not affect the number of CALs required.

For additional information about multiplexing refer to the Microsoft Volume Licensing Brief Multiplexing—CAL Requirements.

Note: Licensed users may manually rekey information (when coming from non-licensed users) into the Dynamics 365 Operations Server. This scenario is not considered multiplexing.

Figure 4: Multiplexing



Microsoft Dynamics 365 for Operations CAL License Types

Microsoft Dynamics 365 for Operations on-premises simplifies licensing of business applications. The primary licensing is by named user license. Microsoft Dynamics 365 for Operations on-premises user licenses classify users into two types, "full users" and "other users".

Full users are the users whose work requires use of the feature rich business applications functionality. Examples of full users are sales people, customer service representatives, finance employees, controllers and supply chain managers. These users have been referred to in the past as Pro users or Power Users. These full users are licensed with a Microsoft Dynamics 365 for Operations CAL.

Other users often represent a large percentage of users in an organization and may consume data or reports from line of business systems, complete light tasks like time or expense entry and HR record updates or be heavier users of the system, but not require full user capabilities. These other users are licensed with either Microsoft Dynamics 365 for Team Members or Microsoft Dynamics 365 for Operations Activity CALs.

There is also Microsoft Dynamics 365 for Operations **Device CAL** licensing available for shared device scenarios. See the Microsoft Dynamics 365 for Operations Device section in this document for more information.

Microsoft Dynamics 365 for Operations

The Microsoft Dynamics 365 for Operations CAL includes full read, edit and approval access across the entire ERP product (formerly known as Microsoft Dynamics AX).

Please review <u>Appendix B</u> for a list of the out of the box Dynamics 365 for Operations roles and their associated user types. For a description of how to create custom roles for Dynamics 365 for Operations and how to license them refer to <u>Appendix C.</u>

Microsoft Dynamics 365 for Operations Team Members

The Microsoft Dynamics 365 for Team Members user CALs are named user CALs designed for users who are not tied to a particular function, but who require basic Microsoft Dynamics 365 for Operations functionality. The Microsoft Dynamics 365 for Team Members user CALs include full read access as well as some write access for select light tasks.

Team Member use rights for Microsoft Dynamics 365 for Operations

The Microsoft Dynamics 365 for Team Members user CAL grants a user the following Microsoft Dynamics 365 for Operations rights for their own use and not for, or on behalf of, other individuals:

- (i) To record any type of time
- (ii) To record any type of expenses
- (iii) Manage personal information
- (iv) Manage direct employee activities in Human Resources
- (v) Create requisitions
- (vi) Create or edit the items related to the following capabilities: quality control, service orders and departmental budgets
- (vii) Approval of time, expense, invoices

Dynamics 365 for Operations Activity

The Dynamics 365 for Operations Activity user CAL is a named user intended for users who may be heavy users of the application, but do not require the use rights of a full user. Dynamics 365 for Operations Activity user CAL use rights include all Microsoft Dynamics for 365 Team Members user CAL user rights as well as the right to:

- (i) Approve all activity related transactions
- (ii) Create or edit the items related to warehousing, receiving, shipping, orders, vendor maintenance, and all budgets
- (iii) Operate a Point-of-Sale (POS) device, store manager device, shop floor device, or warehouse device.

Please review <u>Appendix B</u> for a list of the out-of-the box Microsoft Dynamics 365 for Operations roles and their associated user types.

Microsoft Dynamics 365 for Operations Device

With the Microsoft Dynamics 365 for Operations Device CAL multiple users can access through a device to operate a point of sale device, shop floor device, warehouse device or store manager device.

- "Point of Sale Device" means one device located in the commerce location, used by any individual, for completing customer facing sales of goods or services transactions.
- "Store Manager Device" means one device located in the Commerce Location, used by any individual, dedicated to performing the following tasks solely for that Commerce Location (i) managing and replenishing inventory, (ii) balancing cash registers and processing daily receipts, (iii) configuring and maintaining menu options displayed by the ISV Devices, (iv) purchasing supplies and services required to run the Commerce Location operations, (v) managing Commerce Location staff, (vi) processing reports required to analyze and manage Commerce Location results, and (vii) managing master data related to Commerce Location operations.
- "Commerce Location" or "Store" means a physical location (static or itinerant) operated by customers when closing goods or services transactions with their clients.
- "Shop Floor Device" means one device dedicated to performing manufacturing shop-floor functions and that device may not be used for other purposes.
- "Shop Floor Functions" means clock-in and clock-out, starting and finishing production jobs
 (including project activities carried out on the shop floor), reporting progress, materials
 consumption and completion, viewing documents and instructions related to production jobs,
 and viewing worker holiday balances.

- "Warehouse Device" means one device dedicated to performing warehousing functions, and that may not be used for any other purposes.
- "Performing Warehousing Functions" means receiving, putting-away, doing internal stock transfers, picking, packing, capturing product attributes, and shipping goods plus performing inventory count checks in the context of a warehouse management system and posting output and materials consumption against production orders when captured as transfers of raw materials and finished goods between a warehouse and a production line (all other types of transactions are excluded).

Note: Microsoft Dynamics 365 for Operations Device CAL use rights are also available to Microsoft Dynamics 365 for Operations Activity users. When multiple users who only require these use rights work exclusively on shared devices, generally it will be more cost effective to license those devices with the Microsoft Dynamics 365 for Operations Device CAL. When a single user utilizes one or more dedicated personal devices, it will be more cost effective to license that user with a Microsoft Dynamics 365 for Operations Activity CAL.

Retail Deployments

Retail deplopyments are not supported in Dynamics 365 for Operations on-premises. Customers who need retail capabilities need to license Dynamics 365 for Operations on-premsies and downgrade to AX 2012 R3. Please see AX 2012 Retail Licensing Guide and refer to the AX downgrade mappings table to determine appropriate licensing.

Customization

Customizations may be based on security roles included in Microsoft Dynamics 365 for Operations on-premises or created by a customer or partner. If the customization is based on or replicates the functionality of security roles included in Microsoft Dynamics 365 for Operations on-premises or if the entity links to security roles included in Microsoft Dynamics 365 for Operations on-premises, then users accessing the customization must also be licensed to access the included or replicated security role.

Please review Appendix C for more details about customization use rights.

Additional Services and Software

Microsoft offers additional services and software that work in tandem with Microsoft Dynamics 365 for Operations on-premises, including Unified Service Desk.

Other Product Licenses

Please refer to the Microsoft Dynamics 365 for Operations on-premises implementation guide for documentation on technical requirements for running Microsoft Dynamics 365 for Operations on-premises. Licenses for Microsoft 365 for Operations on-premises do not include licenses for other products that may be required for the customer's installation; product licensing rights for these must be established separately.

View Implementation Guide and System Requirements for Microsoft Dynamics 365 for Operations onpremises on <u>TechNet</u>. The <u>Microsoft License Advisor Tool</u> can help determine the licenses needed.

Software Assurance

Software Assurance includes a core set of benefits to help improve workforce productivity, streamline software deployment, and reduce costs. A distinctive set of benefits, such as new software versions, planning services, 24x7 phone and Web support, training, and more—all designed to help the customer get the most from their organization's Volume Licensing purchase.

The customer's specific Software Assurance benefits vary according to the Volume Licensing program. Refer to the resources and tools below to learn more about the Software Assurance benefits available to their organization.

To learn more about the Software Assurance benefits for Microsoft Dynamics 365 for Operations on-premises customers, visit https://www.microsoft.com/en-us/licensing-programs/software-assurance-default.aspx to view an interactive benefit chart detailing the benefits of the Software Assurance benefits for Microsoft Dynamics 365 for Operations on-premises or https://www.microsoft.com/en-us/licensing/licensing-programs/software-assurance-default.aspx#tab=3 to check customers benefits post-purchase.

On-Premises Upgrades, Downgrades and Migration

License Upgrade Path for Volume Licensing (VL)

Customers who are current on their Software Assurance Plan as of June 1, 2017 are entitled to upgrade the licenses from Microsoft Dynamics AX 2012 R3 to Microsoft Dynamics 365 for Operations on-premises as shown below upon renewal.

Qualifying Licenses purchased before March 30, 2017

Customers who purchased Qualifying Licenses before March 30, 2017 may upgrade to and use the the following Migration License.

Qualifying License(s)	Migration License(s)
Microsoft Dynamics AX Enterprise CAL (User)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Operations Activity On-premises CAL, or Microsoft Dynamics 365 for Operations Device On-premises CAL
Microsoft Dynamics AX Enterprise CAL (Device)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Operations Device CAL
Microsoft Dynamics AX Functional CAL (User)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Operations Activity On-premises CAL, or Microsoft Dynamics 365 for Operations Device On-premises CAL
Microsoft Dynamics AX Functional CAL (Device)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Operations Device CAL
Microsoft Dynamics AX Task CAL (User)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Team Members On-premises CAL, or Microsoft Dynamics 365 for Operations Device On-premises CAL
Microsoft Dynamics AX Task CAL (Device)	Microsoft Dynamics 365 for Operations Activity On-premises CAL, or Microsoft Dynamics 365 for Operations Device CAL
Microsoft Dynamics AX Self Serve CAL (User)	Microsoft Dynamics 365 for Team Members On-premises CAL
Microsoft Dynamics AX Self Serve CAL (Device)	Microsoft Dynamics 365 for Team Members On-premises CAL
Microsoft Dynamics AX Server	Microsoft Dynamics 365 for Operations Server
Microsoft Dynamics AX Store Server	NA

Qualifying Licenses purchased after April 1, 2017

Customers who purchased Qualifying Licenses after April 1, 2017 may upgrade to and use the the following Migration License.

Qualifying License(s)	Migration License(s)
Microsoft Dynamics AX Enterprise CAL (User)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Operations Activity On-premises CAL
Microsoft Dynamics AX Enterprise CAL (Device)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Operations Device CAL
Microsoft Dynamics AX Functional CAL (User)	Microsoft Dynamics 365 for Operations On-premises CAL, or Microsoft Dynamics 365 for Team Members On-premises CAL
Microsoft Dynamics AX Functional CAL (Device)	Microsoft Dynamics 365 for Operations Activity On-premises CAL
3 Microsoft Dynamics AX Task CAL (User)	1 Microsoft Dynamics 365 for Operations Activity On-premises CAL
Microsoft Dynamics AX Task CAL (User)	Microsoft Dynamics 365 for Team Members On-premises CAL
3 Microsoft Dynamics AX Task CAL (Device)	1 Microsoft Dynamics 365 for Operations Device CAL
2 Microsoft Dynamics AX Task CAL (Device)	1 Microsoft Dynamics 365 for Operations Activity On-premises CALs
Microsoft Dynamics AX Self Serve CAL (User)	Microsoft Dynamics 365 for Team Members On-premises CAL
Microsoft Dynamics AX Self Serve CAL (Device)	Microsoft Dynamics 365 for Team Members On-premises CAL
Microsoft Dynamics AX Server	Microsoft Dynamics 365 for Operations Server
Microsoft Dynamics AX Store Server	NA

License Upgrade Path for Dynamics Price List (DPL)

Customers who are current on their Software Assurance Plan as of June 1, 2017 are entitled to upgrade the licenses from Microsoft Dynamics AX 2012 R3 to Microsoft Dynamics 365 for Operations on-premise as shown below upon renewal.

Qualifying Licenses purchased before March 30, 2017

Customers who purchased Qualifying Licenses before March 30, 2017 may upgrade to and use the the following Migration License.

Qualifying License(s)	Migration License(s)
Enterprise User CAL (Named User)	Dynamics 365 for Operations (Named User), or
	Dynamics 365 for Operations Activity (Named User)
Enterprise Device CAL (Device)	Dynamics 365 for Operations (Named User), or
	Dynamics 365 for Operations Device (Device)
Functional User CAL (Named User)	Dynamics 365 for Operations (Named User), or
	Dynamics 365 for Operations Activity (Named User)
Functional Device CAL (Device)	Dynamics 365 for Operations (Named User), or
	Dynamics 365 for Operations Device (Device)
Task User CAL (Named User)	Dynamics 365 for Operations Activity (Named User), or
	Dynamics 365 for Team Members (Named User)
Task Device CAL (Device)	Dynamics 365 for Operations Device (Named User), or
	Dynamics 365 for Operations Activity (Named User)
Self Serve User CAL (Named User)	Dynamics 365 for Team Members (Named User)
Self Serve Device CAL (Device)	Dynamics 365 for Team Members (Named User)
Microsoft Dynamics AX 2012 Server	Dynamics 365 for Operations Server
1 Standard Commerce Core Server (2 Pack)	4 Dynamics 365 for Operations Server
AX Store Server	NA

Qualifying Licenses purchased after April 1, 2017

Customers who purchased Qualifying Licenses after April 1, 2017 may upgrade to and use the the following Migration License.

Qualifying License(s)	Migration License(s)
Enterprise User CAL (Named User)	Dynamics 365 for Operations (Named User), or
	Dynamics 365 for Operations Activity (Named User)
Enterprise Device CAL (Device)	Dynamics 365 for Operations (Named User), or
	Dynamics 365 for Operations Device (Device)
Functional User CAL – Limited Upgrade (Named User)	Dynamics 365 for Operations Activity (Named User), or
effective May 1, 2017	Dynamics 365 for Team Members (Named User)
Functional Device CAL – Limited Upgrade (Device) effective	Dynamics 365 for Operations Activity (Named User)
May 1, 2017	
3 Task User CAL – Limited Upgrade (Named User)	1 Dynamics 365 for Operations Activity (Named User) , or
	1 Dynamics 365 for Team Members (Named User)
3 Task Device CAL – Limited Upgrade (Device)	1 Dynamics 365 for Operations Device (Device), or
2 Task Device CAL – Limited Upgrade (Device)	1 Dynamics 365 for Operations Activity (Named User)
Self Serve User CAL (Named User)	Dynamics 365 for Team Members (Named User)
Self Serve Device CAL (Device)	Dynamics 365 for Team Members (Named User)
Microsoft Dynamics AX 2012 Server	Dynamics 365 for Operations Server
1 Standard Commerce Core Server (2 Pack)	4 Dynamics 365 for Operations Server
Store Server	NA

Customers who license Microsoft Dynamics 365 for Operations on-premises as of June 1, 2017 are entitled to downgrade the software from Microsoft Dynamics 365 for Operations on-premise server to Microsoft Dynamics AX 2012 R3 server.

License Downgrade Path for Dynamics Price List (DPL)

Qualifying License(s)	Migration License(s)
Dynamics 365 for Operations (Named User)	Enterprise User CAL (Named User), or
	Enterprise Device CAL (Device)
Dynamics 365 for Activity (Named User)	Functional User CAL – Limited Upgrade (Named User), or
	Functional Device CAL – Limited Upgrade (Device)
Dynamics 365 for Operations Device (Device)	3 Task Device CAL – Limited Upgrade (Device)
Dynamics 365 for Team Members (Named User)	Self Serve User CAL (Named User), or
	Self Serve Device CAL (Device)
Dynamics 365 for Operations Server	Microsoft Dynamics 2012 Server
4 Dynamics 365 for Operations Server	1 Standard Commerce Core Server (2 Pack)
Dynamics 365 for Operations Activity	Store Server

Transitioning from On-Premises to Cloud Deployment

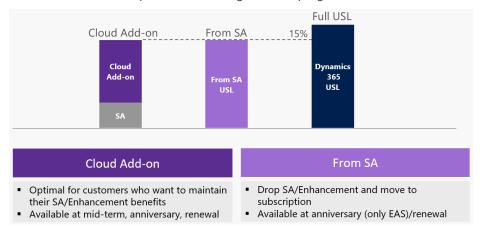
If the customer has Microsoft Dynamics 365 for Operations on-premises CALs covered by active Software Assurance (SA), they can add access to Microsoft Dynamics 365 (Online) two different ways: via cloud Add-on or From SA User Subscription Licenses. Both of these options are designed to recognize customer investments in on-premises licenses by providing a standard discount from the full Dynamics 365 (Online) price while obtaining these non-perpetual rights to the online service for the agreement term. Both options include Dual Use Rights for hybrid deployments.

The license rights for a particular Add-on or From SA User SL are identical to those of equivalent Full User Subscription License (Full USL).

Device CALs purchased as part of an Enterprise Agreement or Enrollment qualify for these User Add-On or From SA options on a 1:1 basis: One Device CAL qualifies for one From SA or Add-on User SL.

From SA option is available for purchase through the Microsoft Volume Licensing Enterprise Agreement, Enterprise Subscription Agreement and Enrollment for Education Solutions (under a Campus and School Agreement) programs.

Add-on option is available for purchase through the Microsoft Volume Licensing Enterprise Agreement, Enterprise Subscription Agreement, Microsoft Product and Service Agreement, and Enrollment for Education Solutions (under a Campus and School Agreement) programs.



Microsoft Dynamics 365 Cloud Add-on

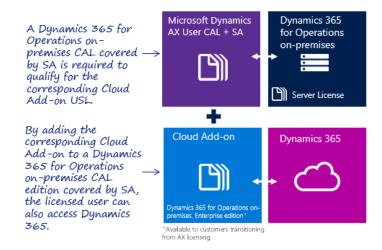
Microsoft Dynamic 365 add-ons to move to cloud are ideal for customers who are not ready to move entirely to the cloud, or are in the middle of their agreement. The Cloud Add-on gives credit for the customers ongoing SA payments.

The Cloud Add-on model includes two parallel commitments:

- 1. A new or existing Software Assurance commitment that the customer will continue to maintain and renew
- 2. An additional Cloud Add-on license commitment that provides rights to the Microsoft Dynamics 365 Online service

The Add-on User SL must be used for the same user of the User CAL. The User SL cannot be subsequently transferred to another user unless the corresponding CAL is also transferred to the new user.

Figure 9: Dynamics 365 Cloud Add-on



Microsoft Dynamics 365 From SA

Microsoft Dynamics 365 From SA offers are ideal for customers who are ready and able to entirely drop SA and move licensing to the cloud.

These licenses are designed for current Microsoft customers who want to transition to the cloud and are licensed to on-premises products. From SA USLs recognize the on-premises investment and thus are offered at a discounted price for customers. In order to purchase From SA USLs, customers must have fully paid qualifying licenses, namely the corresponding on-premises licenses from which the customer is transitioning or more than 3 years of a qualifying software subscription license. The qualifying licenses are detailed in the Product Terms.

From SA is available at anniversary (only for EAS) or renewal.

Availability by Language

Country and language localization availability for Dynamics 365 for Operations on-premises, Enterprise is available here.

Trials

Trials for Microsoft Dynamics 365 for Operations on-premises are available. Requests for the trial environment can be made by sending email request to daxcf@microsoft.com. Include company account number and company name in the request. The trial environments are to be used for evaluation purposes only (not production use). A customer owned/managed Azure subscription is required to deploy the trial environments to the cloud. A local VM is also available for downloaded from the Lifecycle Services project.

Product Deployment

For details around existing customer migration options please see the Microsoft Dynamics 365 for Operations on-premises, Enterprise Transition Guide document.

Software Fulfillment

The Volume Licensing Service Center (VLSC) is an online platform made to make managing the customer's Microsoft Volume Licensing agreements simple. Within the VLSC, the customer can access their licensing information, view agreements and purchases for their organization, and access licensing summaries of all entitlements by product and version. The customer can also view all assigned product keys and download products in the VLSC.

Customers who have licensed Microsoft Dynamics 365 (Online) who do not have access to VLSC, but would like to leverage Dual Use Rights for a hybrid deployment may obtain the software through CustomerSource or PartnerSource.

License Keys and Product Activation

To download a customer's Microsoft Dynamics 365 for Operations on-premises license file from PartnerSource Business Center, follow these steps:

- 1. Log on to PartnerSource Business Center.
- 2. Click Specific Customer Information.

- 3. Enter search information in the Customer Lookup form to search for the customer, and then click
- 4. Click the Company Name of the customer searched for in step 3. This opens up Customer Summary.
- 5. Under Registered Products on the Customer Summary page, click Registration Keys.
- 6. Select version 07 in the Request and Display License Keys For Version field.
- 7. Click Display License Keys.
- 8. On the Request License Keys page, select Download Current License/Registration Key.
- 9. Click Save As in the File Download dialog box, select the folder to download the license file in the Save As dialog box and then click Save.

Note: If the customer cannot see Registration keys in PartnerSource Business Center they will need to ensure that their PartnerSource Business Center Profile has "Can See Registration Keys" set to yes.

Links for Additional Information

Microsoft Dynamics 365 http://download.microsoft.com/documents/en-

us/dynamics/pricing/Dynamics 365 Enterprise edition Licensing Guide.pdf

Online Licensing Guides:

http://aka.ms/s201h6 Microsoft Dynamics AX http://aka.ms/gtn5wt Microsoft Dynamics CRM

On-Premises Licensing Guides:

http://aka.ms/Jswgcc AX 2013 R3 http://aka.ms/kn26ux CRM 2016

https://community.dynamics.com/b/msftdynamicsblog Microsoft Dynamics Blog

Microsoft Volume Licensing www.microsoft.com/licensing

https://mspartner.microsoft.com/en/us/Pages/Licensing/get-Volume Licensing Training:

licensingready.aspx

http://www.microsoft.com/licensing/software-assurance/default.aspx Software Assurance

Activate Software Assurance Benefits https://www.microsoft.com/en-us/Licensing/existing-customer/product-

activation.aspx

Microsoft License Advisor http://www.microsoft.com/licensing/mla/default.aspx www.microsoft.com/licensing/contact/default.mspx Contact a Licensing Specialist

CustomerSource https://mbs.microsoft.com/customersource/

Microsoft Downloads Center http://www.microsoft.com/downloads

Cloud Solution Provider Program https://mspartner.microsoft.com/en/us/Pages/solutions/cloud-reseller-

(MPN) overview.aspx

Appendix A: Ensuring Accurate Licensing

Microsoft Dynamics customers have asked for easier ways to implement Software Asset Management (SAM) across their organization, because they realize that SAM can help them:

- streamline IT resources and improve visibility and control of the customer's environment now and in the future,
- increase awareness of the organization's overall software purchasing needs and better work with software vendors to meet those needs, and
- get greater insight into how to manage the organization's assets, helping them to make more informed decisions to reduce risk and plan for the future.

To help the customer navigate through the product flexibility and its impact on licensing, we have created a report within the application that looks at all of the Menu Items associated to each user directly accessing Microsoft Dynamics 365 for Operations Server and computes the assigned number of users by user type. The customer is responsible for determining the number and CAL level of third party users directly accessing Microsoft Dynamics 365 for Operations Server and subtracting these users from the report generated by the system. The customer is also responsible for determining the number and CAL level of internal users indirectly accessing Microsoft Dynamics 365 for Operations Server and manually adding these users to the report generated by the system.

By comparing this to the customer's license purchase information from the Volume Licensing Service Center (if purchasing through Volume Licensing) or CustomerSource (if purchasing through BVL), the customer can identify discrepancies in their licenses. A customer not currently on a plan can get their license purchase information by contacting their partner.

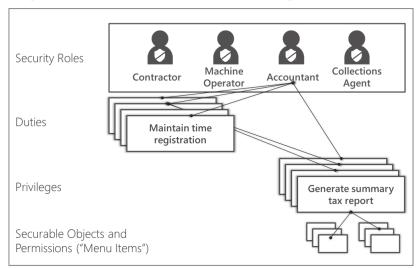
The customer is advised to check licensing by running the report whenever they make a change, but are required to run the report at least annually per the Software License Terms. the customer may voluntarily share the results of the Usage Report with Microsoft or any other third party, but are not required to do so. Running the report before and after changing Roles, security, and user permissions will help confirm the impact of changes to the license requirements.

Appendix B: Microsoft Dynamics 365 for Operations Security Roles by User CAL Level

Overview of Security Roles

Providing users with access to the product functionality is done by assigning each user one or more Security Roles. Microsoft Dynamics 365 for Operations Security Roles combine meaningful packages of product functionality and access rights required to perform actions relevant to that role.

Figure 5: Assigning a Security Role to a user provides access to product functionality



To make it easier to understand the licenses required, each Microsoft Dynamics 365 for Operations Security Role has a pre-determined user type. When the customer assigns Security Roles to users, they then know what User CAL those users require.

For example, in a manufacturing organization, the Accountants and Field Service Technicians require different use rights. By assigning those user groups to the appropriate Security Role, they get the functionality they need, and the customer knows the User CAL type that is required.

Notes:

- Customers can assign multiple Security Roles to one user, in which case the highest User CAL type required covers all the user rights.
- Customers have the flexibility to configure or customize Security Roles. This may impact the license required
 for the new/modified Security Roles. Please refer to the <u>Appendix C</u> for more information about how such
 customization can impact licensing requirements.

Out of the box security roles for Dynamics 365 for Operations

Role	Description	User SL		
Human Resources		Team Members	Activity	Operations
Contractor	Worker in contractor relationship with legal entities	•	•	•
Employee	Worker in employment relationship with legal entities	•	•	•
Pending worker	Worker in pending employment relationship with legal entities	•	•	•
Manager	Supervisor in reporting relationship with subordinates	•	•	•

Compensation and benefits manager	Documents compensation and benefit events, responds to compensation and benefit inquiries and records the financial consequences of compensation and benefit events			•
FMLA administrator	Information and functionality around managing employees who are out an FMLA leave			•
Human resource assistant	Documents human resource events and responds to human resource inquiries			•
Human resource manager	Periodically reviews human resource process performance and enables the human resource process			•
Payroll administrator	Documents payroll events, responds to payroll inquiries and records the financial consequences of payroll events			•
Payroll manager	Authorizes activity in the payroll process			•
Recruiter	Documents recruiting events, responds to recruiting inquiries and records the financial consequences of recruiting events			•
Training manager	Documents training events, responds to training inquiries and records the financial consequences of training events			•
Retail		Team Members	Activity	Operations
Retail warehouse clerk	The retail warehouse clerk performs picking, receiving, and stock counting in a store or warehouse	•	•	•
Retail store manager	The retail store manager performs store management functions at the store, such as managing sales reports, inventory movements, and inventory counts		•	•
Retail warehouse manager	Manages order picking, shipping and receiving for retail channels		•	•
Retail catalog manager	At the head office, the retail catalog manager maintains and publishes retail catalogs			•
Retail merchandising manager	At the head office, the retail merchandising manager maintains and replenishes retail products and assortments			•
Retail operations manager	At the head office, the retail operations manager is responsible for all non-merchandising operations, such as configuring stores, registers, and staff			•
Retail service	Retail service account			•
Retail store IT	Performs retail point of sale client configuration and installation at the retail store level			•
C-Suite		Team Members	Activity	Operations
Chief executive officer	Reviews the financial and operational performance		•	•
Chief financial officer	Reviews the financial performance		•	•
Budgeting		Team Members	Activity	Operations
Budget contributor	Create, update and approve departmental budget plans.	•	•	•

Budget clerk	Documents budget events and responds to budget inquiries		•	•
Budget manager	Reviews budget process performance and enables the budget process			•
Financials and Accounting		Team Members	Activity	Operations
Positive pay clerk	Document accounts payable positive pay events	•	•	•
Accountant	Documents accounting events and responds to accounting inquiries			•
Accounting manager	Reviews accounting, customer invoice, vendor invoice, and payment process performance and enables those processes			•
Accounting supervisor	Reviews accounting process performance and enables the accounting process			•
Accounts payable centralized payments clerk	Documents accounts payable centralized payment events and responds to centralized payment inquiries			•
Accounts payable clerk	Documents vendor invoice events and responds to vendor inquiries			•
Accounts payable manager	Reviews vendor invoice process performance and enables the vendor invoice process			•
Accounts payable payments clerk	Documents accounts payable payment events and responds to payment inquiries			•
Accounts receivable centralized payments clerk	Documents accounts receivable centralized payment events and responds to centralized payment inquiries			•
Accounts receivable clerk	Documents customer invoice events and responds to customer inquiries			•
Accounts receivable manager	Reviews customer invoice process performance and enables the customer invoice process			•
Accounts receivable payments clerk	Documents accounts receivable payment events and responds to payment inquiries			•
Auditor	This role is designed for in-house or external auditors. It provides read-only access to a majority of the system. It is also used for audit policy management			•
Collections agent	Documents collections events and responds to collections inquiries			•
Collections manager	Reviews collections process performance and enables the collections process			•
Financial controller	Reviews all accounting process performance and enables those processes			•
Tax accountant	Documents fiscal events and responds to fiscal inquires			•
Tax engine developer	Create and manage taxable document model mappings.			•

Tax engine functional consultant	Create and manage generic tax engine components (taxable document and tax document)			•
Treasurer	Documents treasury events and responds to treasury inquiries			•
Project Management		Team Members	Activity	Operations
Project timesheet delegate	Enables creation and approval of project timesheets	•	•	•
Project timesheet user	Enables creation and approval of project timesheets	•	•	•
Project assistant	Documents project accounting process events and responds to project accounting process inquiries		•	•
Project manager	Documents the project forecast/budget events and responds to project forecast/budget inquiries. Maintains project accounting master information and responds to project accounting master information inquiries. Authorizes project accounting process events		•	•
Resource manager	Maintains project resource tasks		•	•
Project accountant	Maintains project accounting policies			•
Project supervisor	Enables and reviews the project accounting process			•
Procurement		Team Members	Activity	Operations
Vendor contact	Views and responds to purchase orders through Vendor Collaboration, for the vendor accounts where the user is a contact person	•	•	•
Buying agent	Documents purchase events and responds to purchase inquiries		•	•
Vendor account manager	Documents vendor events and responds to vendor inquiries		•	•
Purchasing agent	Documents request for quotation events and responds to request for quotation inquiries. Documents purchasing events and responds to purchasing inquiries. Maintains purchasing agreements and vendor master information.			•
Purchasing agent - Public Sector	Documents request for quotation events and responds to request for quotation inquiries. Documents purchasing events and responds to purchasing inquiries			•
Purchasing manager	Reviews purchasing process performance and enables the purchasing process. Maintains purchasing agreements and vendor master information.			•
Sales		Team Members	Activity	Operations
Sales clerk	Documents sales events and responds to sales inquiries		•	•
Sales representative	Documents sales events and responds to sales inquiries		•	•
Sales manager	Reviews sales process performance and enables the sales process			•

Customer Service		Team Members	Activity	Operations
Customer service representative	Documents customer service events and responds to customer service inquiries.		•	•
Customer service manager	Reviews customer service process performance and enables the customer service process			•
Marketing		Team Members	Activity	Operations
Marketing coordinator	Produces and distributes marketing materials			•
Marketing manager	Manages product marketing			•
Field Service		Team Members	Activity	Operations
Field service technician	Visits customers in the field to perform service orders	•	•	•
Service dispatcher	Organizes the service technicians and prioritizes service orders	•	•	•
Service delivery manager	Reviews and enables the service order process			•
Transportation		Team Members	Activity	Operations
Transportation coordinator	Enables inbound, outbound, rating, routing, and handling of transportation process			•
Transportation logistics manager	Set up, maintain, and configure the network planning that are used in transportation management processes			•
Manufacturing		Team Members	Activity	Operations
Lean waterspider	Responds to inventory needs on the production line	•	•	•
Time registration user	Worker enabled to use advanced features for time registration	•	•	•
Machine operator	Works on production orders and makes registrations in Manufacturing execution		•	•
Shop supervisor	Reviews the time registration process and maintain corrections. Authorizes production feedback registrations and responds to inquiries from production.		•	•
Production manager	Reviews the production plan and ensures the proper resources are available			•
Production planner	Schedules and plans productions			•
Production supervisor	Enables the production process. Ensures the day-to-day execution of orders/jobs so Machine operators know what to work on, who is available and can respond to the main requests from Machine operator.			•
Distribution		Team Members	Activity	Operations
Receiving clerk	Documents receiving operation events and responds to warehouse receiving operation inquiries		•	•
Shipping clerk	Documents shipping operation events and responds to warehouse shipping operation inquiries		•	•
Warehouse worker	Documents warehouse operation events and responds to warehouse operation inquiries		•	•

Materials manager	Enables and reviews processes, maintains master data, and responds to inquiries within logistics and material management.			•
Warehouse manager	Enables and reviews processes, authorizes recordings, maintains master data, and responds to inquiries within warehouse management			•
Warehouse planner	Plans and authorizes warehouse work. Maintains warehouse planning master information and responds to warehouse work planning inquiries.			•
Cost Accounting		Team Members	Activity	Operations
Cost object controller	Monitors monetary and non-monetary performance of assigned cost objects.	•	•	•
Cost accountant	Implements dimensions, policies, and reporting structures according to the strategy set by the Cost accounting manager			•
Cost accountant clerk	Performs repetitive tasks aligned with predefined policies and reporting structures			•
Cost accounting manager	Sets the overall strategy for how cost accounting is performed in the Enterprise.			•
Inventory accountant	Documents costs, inventory valuations, and cost accounting events. Responds to costs, inventory valuations, and cost accounting events inquiries.			•
Inventory accountant clerk	Authorizes and maintains costs, inventory valuations, and cost accounting calculations. Responds to costs, inventory valuations, and cost accounting inquiries.			•
Engineering		Team Members	Activity	Operations
Product designer	Designs new and modifies existing BOM structures			•
Product design manager	Reviews and authorizes product BOM structures			•
Process engineer	Defines processes to make new products			•
Process engineering manager	Reviews and authorizes new production processes			•
Quality Control		Team Members	Activity	Operations
Quality control clerk	Documents quality control events and responds to quality control inquiries	•	•	•
Quality control manager	Enables and reviews processes, maintains master data, and responds to inquiries within quality control			•
Administrator		Team Members	Activity	Operations
System user	System role for all users	•	•	•
Data Management Operation User	Provides access to all data management workspace menu items. Note that this role does not control access to any of the entity privileges that are required to actually perform the data operation. As such this role can be assigned to any other application role for	•	•	•

	only perform data activities for a restricted set of entities
Data Management Administrator	Super user for the data management activities in the system. In addition to the capabilities of the DataManagementMigrationUser and DataManagementOperationsUser, this role provides access to the DataManagementITWorkspace - an operational workspace to monitor all data management activities
Data Management Migration User	User that controls permission to all entities in the system. This role is extended in all models where entities exist and need to be provisioned for data management activities for users. The current pattern is to create - per Entity View and Maintain privileges and then add it to the entity's category bound View and Maintain duties defined in that model. These duties are all part of the DataManagementMigrationUser extension that will be defined in the model.
Electronic reporting developer	Maps database to adversary data models
Electronic reporting functional consultant	Maps data models to formats
System Administrator	System Administrator role for Dynamics AX •
System document branding administrator	Controls access to the Document Branding Management forms
Security administrator	Maintains user and security setup in Microsoft Dynamics AX, grants the ability to create and maintain security roles, duties, and privileges and the ability to assign users to roles, define role assignment rules, and maintain data security policies
Information technology manager	Maintains servers and software for Microsoft Dynamics AX. Maintains and configures settings for batch servers, load balancing, databases, Enterprise Portal, Services, and Workflow

Note: Management Reporter functionality is included in the Microsoft Dynamics 365 for Operations. To get the use rights, the Management Reporter Designers require an Operations CAL and Management Reporter Viewers require a Microsoft Dynamics for 365 Team Member.

Appendix C: Operations Customization and Licensing Requirements

Microsoft Dynamics 365 for Operations is fully customizable to provide customers with the right experience for every user. Microsoft Dynamics 365 for Operations has over 10,000 Menu Items which are mapped to the three user types. To make it faster and easier to deploy the product and determine licensing requirements, these Menu Items are associated with certain Security Roles.

The required SL for a given user is determined by the highest user type classification of the Menu Items to which the user will have access. For example, if the customer assigns an Accountant to a Role that includes access to a Menu Item classified as "Operations App", then that person requires a Dynamics 365 for Operations SL. Menu items that are classified at the "Team Members" level are available to all users to which the customer has assigned a Team Members User or higher level User.

For an even better fit in their organizations, customers can change which actions may be performed by specific individuals or Roles. When customizing, it is important to remember that the license required is determined by the highest-level Menu Item to which that individual has access.

Assigning Multiple Roles to a Single User

The straight forward way to customize which actions a specific employee may perform in Microsoft Dynamics 365 for Operations is by assigning multiple Roles to that employee. For example, an employee could be assigned both the Customer Service Rep and the Field Technician Roles and could therefore perform actions associated with both Roles. In this case, the employee would still only need a single User SL. Since the Customer Service Rep Role is designated at a higher user type level (Operations) than the Field Technician Role (Team Members), the employee would only need the Dynamics 365 for Operations User SL to perform actions associated with both Roles.

Changing Menu Items Associated with a Role

Another way to customize what actions users may perform is by changing which Menu Items are associated with a Role. For example, if a customer wants everyone who is assigned the Field Technician Role to be able to also approve posting of service orders (which is designated as an Operations level action), then they can customize the Role to include the "Approve posting of service order" Menu Item. Because the required SL is determined by the highest level action the user may perform, all users assigned to the Field Technician Role would then require the Operations User SL.

Changing Menu Items Associated with an Individual

Further, customers may assign specific actions to specific users. Following the example above if the customer has 20 employees assigned to the Field Technician Role and wants to allow only five of those employees the ability to approve posting of service orders, they may assign the "posting of service order" Menu Item to those five individuals. Those five individuals would then require the Operations User SL, while the remaining 15 employees assigned to the Field Technician Role would require the Team Members User SL.

Creating Menu Items

Partners and customers may also create Menu Items to fit specific customer scenarios. When doing so, those new Menu Items must be mapped to the User SL type that best matches the type of use based on the definitions of user SLs found in this document.

Notes:

- Roles in Microsoft Dynamics 365 for Operations are not the same as job titles.
- "Menu Item" means an object that allows users to display or view a form, sub-form, or URL in a browser application; run a task that triggers a system class, function, workflow or web-action initiated by a user; or cause an output in the product or a separate device.

Menu Items are classified at one of the User SL types. Users with a given SL have access to each Menu Item classified at—or below—that User SL type.

Appendix D: Change Log

Page	Topic	Change	Action	Date
7	Retail	Clarified	Retail deplopyments are not supported in Dynamics 365 for Operations on-premises. Customers who need retail capabilities need to license Dynamics 365 for Operations on-premsies and downgrade to AX 2012 R3.	February 2018

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