



Microsoft Dynamics 365 for Operations, on-premises Licensing Guide

July 2021

What's new in this licensing guide?

This licensing guide was updated to reflect licensing updates and new online service offerings as of July 2021.

Type of Change	New offer or Change
Removed	Procurement security role: removed vendor (external) roles

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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. Dynamics 365 for Operations, on-premise is the newest version of Microsoft's current ERP on-premises product. 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 applies for users with Dynamics 365 for Operations, on-premises licenses and does not supersede or replace any of the legal documentation covering use rights. For brevity and ease of reading, the license names are shortened, to exclude "Dynamics 365". For a complete list of Dynamics 365 for Operations, on-premises by branded name refer to [Appendix A](#).

For help determining the right technology for any given organization, including the license requirements for a specific product or scenario, consult with your Microsoft Dynamics Certified Partner.

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 [website](#) and the Product Terms (PT) found on the [Volume Licensing website](#).

How to license Dynamics 365 for Operations, on-premises

Dynamics 365 for Operations, on-premises is available on a Microsoft Volume License (VL) Enterprise Agreement (EA) and the Dynamics Price List (DPL).

For software deployments, Dynamics 365 for Operations, on-premises is licensed under the 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.

Licensing Overview

Server License

Before a customer runs any instance of the Dynamics 365 for Operations, on-premises software, they must obtain a Operations Server license for each of their servers. For each 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 Operations Server licenses.

Client Access Licenses

Customers must purchase Client Access Licenses (CALs) for users or devices accessing the Operations Server. 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 Dynamics 365 for Operations, on-premises CALs. Customers must be active on a Dynamics Customer Service and Support (CSSG) Plan or Software Assurance to receive the benefit of License Mobility.

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.

Assigned Licenses

Assigned licenses provide a named user or dedicated shared device with access to applications.

Full User Access Licenses

Full users are the users whose work requires use of the feature rich business applications functionality.

- **Full users:** These users receive unrestricted direct or indirect access to all the functionality in the licensed server software including setting-up, administering, and managing all parameters or functional processes across the ERP Solution. Full users perform tasks across the ERP Solution using all the functionality included with the Operations CAL and require more write capabilities than those available to Team Members.

Additional User Access Licenses

Additional 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 or be heavier users of the system, but not require full user capabilities.

- **Activity:** This named user license is intended for additional users who require more capabilities than the Team Members license, but do not require the use rights of a full user.
- **Device:** This license grants access to Dynamics 365 Operations, on-premises from a device. Any user may access a licensed device without the need for a separate user CAL. The Device CAL has restricted functionality 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 Operations Server or earlier versions of the software running on the organization's servers. Note: Since Dynamics 365 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.

- **Team Members:** This license, also assigned to a named user, significant percentage of users in an organization and may consume data or reports from line of business systems, complete light tasks but don't require full user capabilities. The Team Members license entitles the user to perform Team Members user tasks across the ERP Solution using the same functionality footprint available to the Operations users. Every Team Members user requires a license.

Assigned Application Licensing

Dynamics 365 for Operations

The Operations CAL includes full read, edit and approval access across the entire ERP product. The Operations CAL automatically includes enough Asset Management capacity for you to manage and maintain up to 100 physical assets throughout their lifecycles. If you need additional asset capacity, you may buy more.

Additional Asset Management capacities are licensed per tenant. If you use Asset Management, you must license sufficient Asset Management capacity to meet or exceed the number of assets you want to manage. For example, if you have 1,500 assets to manage in Asset Management, you'll need 14 additional asset capacity licenses. Once you've bought 50 Asset Management capacity licenses—enough for 5,000 assets—you may manage unlimited assets with no additional purchase.

The only assets that must be counted against these capacities are:

- Assets you want to manage with Asset Management
- Parent level assets for which you want to track maintenance, costs, and/or location

Application/Capacity	Included Capacity	Add-On Capacity
Asset Management	<ul style="list-style-type: none"> • 100 assets/tenant/month 	Additional Asset Management: <ul style="list-style-type: none"> • 100 assets/tenant/month

Operations Security Roles

Role	Security Role	Team Members	Activity	Operations
Administrator				
System user	System role for all users	•	•	•
Data management operations 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 users that require access to specific entity sets or can be added to any custom roles where users can simply 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 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 Dynamics AX. Maintains and configures settings for batch servers, load balancing, databases, Enterprise Portal, Services, and Workflow			•
Budgeting				
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			•
Cost Accounting				
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			•

Role	Security Role	Team Members	Activity	Operations
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			•
Customer Service				
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			•
C-Suite				
Chief executive officer	Reviews the financial and operational performance		•	•
Chief financial officer	Reviews the financial performance		•	•
Distribution				
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			•
Engineering				
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			•
Field Service				
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			•
Financials and Accounting				
Accounts payable positive payment 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			•

Role	Security Role	Team Members	Activity	Operations
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 inquiries			•
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			•
Manufacturing				
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			•
Marketing				
Marketing coordinator	Produces and distributes marketing materials			•
Marketing manager	Manages product marketing			•
Procurement				
Vendor contact (external)	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			•
Project Management				
Project manager, Public sector	Inquire into Purchase order to invoice progress for public sector	•	•	•
Project timesheet delegate	Enables creation and approval of project timesheets	•	•	•
Project timesheet user	Enables creation and approval of project timesheets	•	•	•

Role	Security Role	Team Members	Activity	Operations
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			•
Purchasing manager	Reviews purchasing process performance and enables the purchasing process. Maintains purchasing agreements and vendor master information			•
Quality Control				
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			•
Retail				
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			•
Sales				
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			•
Talent				
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			•
Transportation				

Role	Security Role	Team Members	Activity	Operations
Transportation coordinator	Enables inbound, outbound, rating, routing, and handling of transportation process			•
Logistics manager	Set up, maintain, and configure the network planning that are used in transportation management processes			•

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

Cross Application Licensing

Assigned Access Licenses

Operations Activity

The 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. Operations Activity user CAL use rights include all 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.

Operation Device

The Operations Device license is a limited license with a subset of the Operations capabilities. This device allows multiple users to use a licensed device to operate a point-of-sale device, shop floor device, or warehouse device. A single device can provide any of the following functionality in any combination. Device CALs do not include all the capabilities of the full user.

Note: Operations Device CAL use rights are also available to 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 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 Operations Activity CAL.

Device SL	Operations Device Functionality
Point of Sale	One device located in the Commerce location, used by any individual, for completing customer facing sales of goods or services transactions
Store Manager	One device located in the Commerce location, used by any individual, dedicated to performing the following tasks solely for that Commerce location. Commerce location or Store means a physical location (static or itinerant) operated by you when closing goods or services transactions with customers: <ul style="list-style-type: none"> • Managing and replenishing inventory • Balancing cash registers and processing daily receipts • Configuring and maintaining menu options displayed by the ISV Devices • Purchasing supplies and services required to run the Commerce Location operations • Managing Commerce Location staff • Processing reports required to analyze and manage Commerce Location results • Managing master data related to Commerce Location operations
Shop Floor	One device used for manufacturing shop-floor functions. Shop Floor Functions: <ul style="list-style-type: none"> • 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 • Viewing worker holiday balances

Device SL	Operations Device Functionality
Warehouse Device	One device used for Warehousing functions: <ul style="list-style-type: none"> • Receiving • Putting-away • Doing internal stock transfers • Picking, packing • Capturing product attributes • Shipping goods plus performing inventory count checks in the context of a warehouse management system • 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)

Team Members

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

This license includes read-only access for all Dynamics 365 for Operations, on-premises data as defined in this licensing guide. Unlike the Dynamics 365 online equivalent, this does not include read access to Dynamics 365 (On-premises) or any other on-premises software.

Team Members use rights

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

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

Additional Licensing Requirements

Retail

Retail scenarios using Dynamics 365 for Operations, on-premises are licensed through a combination of the following:

- Operations Server license
- Operations, Operations Activity, and Team Members users CALs
- Operations Device CALs

Please see the use rights above to determine the appropriate licensing for a given server, user or device.

Retail deployments may also utilize the Retail Store Scale Unit, which is a retail server, cloud POS website and channel database deployed locally in a Store. It maintains connectivity with and extends a Dynamics 365 for Operations, on-premises deployment, providing improved performance, business continuity and hybrid capabilities in the store.

The Retail Store Scale Unit installation and use rights are included with the Operations Server license and may be downloaded and installed at no additional cost. All users and devices accessing the Retail Store Scale Unit

must be appropriately licensed. The Retail Store Scale Unit is not available as a standalone license. Required hardware, windows client, or windows server, and SQL licenses must be acquired and licensed separately.

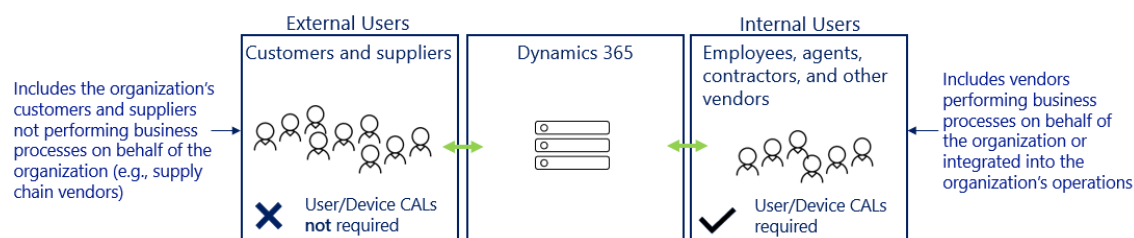
If downgrade rights are utilized to downgrade to Dynamics AX 2012, the Retail Store Server is not an included use right and appropriate licensing must be obtained.

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 Operations Server. External user access is included.

In addition, 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).

However, external user access does 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 Dynamics 365 to manage any portions of their business. In this sense, the customer may not use Dynamics 365 to provide business process outsourcing services to its clients.



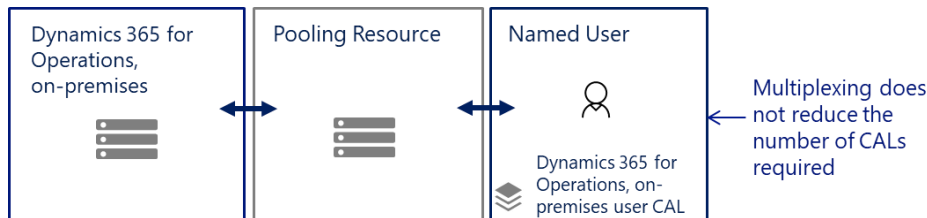
Multiplexing

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 the Operations Server. Multiplexing does **NOT** reduce the number of licenses of any type required to access the Operations Server. Any user or device that accesses the Operations Server—whether directly or indirectly—must be properly licensed.

Dynamics 365 for Operations, on-premises licenses are required for users or devices that directly input, query, or view data from the Operations Server. Similarly Dynamics 365 for Operations, on-premises licenses are required for users or devices that input data into, query, or view data from Operations Server through a pooling device. Pooled connections use a non-interactive user account in Dynamics 365 for Operations, on-premises that can access the system but only via the web service layer. Internal users and devices accessing Dynamics 365 for Operations, on-premises 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 an Operations user in the server software. For example:

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

For additional information about multiplexing refer to the Microsoft Volume Licensing [Brief](#) Multiplexing-CAL Requirements. Note, multiplexing does not reduce the number of user licenses required.



Dual Use Rights

One of the advantages of Dynamics 365 is dual use rights. This allows customers the option to deploy the server software either in Microsoft’s cloud or in a private on-premises or partner-hosted cloud. In some cases, customers may want to deploy both types of instances simultaneously. This might be done to help with migrating a Dynamics 365 on-premises deployment to Dynamics 365, running private Dev/Test deployments in Microsoft Azure.

Dual Use Rights convey Operations server license access rights to Dynamics 365 SLs. Dynamics 365 on-premises CALs have no reciprocal rights to access functionality provided exclusively to Dynamics 365 SLs, nor do Dual Use Rights imply equivalent capabilities between Dynamics CALs and Dynamics 365 SLs.

Users or devices licensed with Dynamics 365 User Subscription Licenses (User SLs) have use rights equivalent to a CAL for the purpose of accessing on-premises functionality. With Dynamics 365 the Operations server license is included with the SLs. Licenses for all supporting servers (e.g., Windows Server and CAL(s)) must be obtained separately.

Dynamics 365 online	Dynamics 365 for Operations, on-premises
Commerce, Human Resources, Finance, Supply Chain Management	Operations
Operations - Activity	Operations Activity
Team Members	Team Members
Operations - Device	Operations Device

Dual Use Rights provide access to the most current version of Dynamics 365 for Operations, on-premises. However, customers may use downgrade rights according to the Dynamics downgrade policy to deploy a qualifying server license.

Dual Use Rights included with Dynamics 365 SLs are non-perpetual and will expire when the cloud subscription expires.

Custom Entities

Dynamics 365 for Team Members and higher provide the right to use custom entities. Custom entities may be based on entities included in Dynamics 365 for Operations, on-premises, or created by a customer or partner. Rights to create or replicate new custom entities are not included with Team Members. If the custom entity is based on or replicates the functionality of entities included in Dynamics 365 for Operations on-premises, or if the entity links to entities included in Dynamics 365 for Operations, on-premises, then users accessing the custom entity must also be licensed to access the included or replicated entity. For example, users creating an entity that replicates the cases entity for a ticketing system would still require the user to be licensed for cases. In other words, customizations may only be performed against entities users are licensed to access.

Customization

Customizations may be based on security roles included in 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 Dynamics 365 for Operations, on-premises or if the entity links to security roles included

in 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 Dynamics 365 for Operations, on-premises, including Unified Service Desk.

Unified Service Desk

Unified Service Desk for Microsoft Dynamics 365 (USD) consolidates numerous communication channels (such as phone, chat, email, and social media) and relevant services into a single interface to enable greater efficiency and productivity.

USD is not available as a standalone license. USD software is installed and run locally on the user's device. The use rights expire upon expiration of the qualifying User SL subscription term or Software Assurance subscription. Only licensed users may use the software. USD installation rights are included with Dynamics 365 Customer Service CALs.

Other Product Licenses

Licenses for additional software that may be required for the solution—such as Microsoft Windows Server and Microsoft SharePoint Server—and their corresponding Access Licenses are not included with the Dynamics 365 for Operations, on-premises license. You must acquire any necessary licenses for these additional products under the licensing model for the particular product (which may be different than the model used for Dynamics 365 for Operations, on-premises). To learn more or acquire licenses for additional software, find and contact a Microsoft Volume Licensing partner via: <https://www.microsoft.com/Licensing/how-to-buy/how-to-buy.aspx>.

For more information about licensing Windows Server and SQL Server, refer to <https://www.microsoft.com/cloud-platform/default.aspx>.

Trials

Trials for 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 (LCS).

Appendix A: License List and Definitions

Dynamics 365 Licenses:	Written as:
Dynamics 365 for Operations	Operations
Dynamics 365 for Operations Activity	Operations Activity
Dynamics 365 for Operations Device	Operations Device
Dynamics 365 for Operations Team Members	Team Members

Definitions:

Client Access License, (CAL) are licenses that permit one limited device, used by any user, to access the Dynamics 365 Business Central solution indirectly. Device means a single physical hardware system, dedicated to Customer's use, to which a License is assigned.

License entitlements are what the customers are entitled to run, and use based on the licenses acquired as described in the SLT.

License keys activate the Microsoft Dynamics software.

Named CALs are assigned on a "named user" basis, meaning each user requires a separate user License; named user licenses cannot be shared but an individual with a named user license may access the service through multiple devices.

User SALs, only available in the subscription Licensing model, grant individual users the right to access the application irrespective of the number of users simultaneously accessing the application. Like named CALs, a unique user SAL must be assigned to each individual user that will access the solution functionality. SALs are specific to an individual and cannot be shared.

Appendix B: Ensuring Accurate Licensing

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 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 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 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.

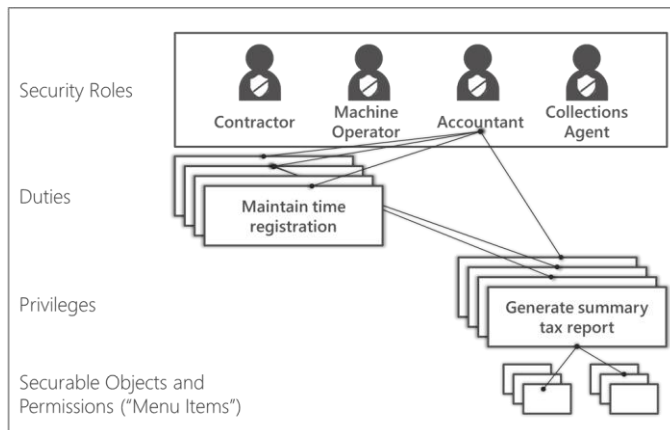
The customer is advised to check licensing by running the report whenever they make a change, but are required to run the report at least annually per the Software License Terms. The customer may voluntarily share the results of the Usage Report with Microsoft or any other third party, but are not required 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 C: Security Role Assignment and Customization Licensing

Overview of Security Roles

Provide users with access to the product functionality by assigning each user one or more security roles. Dynamics 365 for Operations security roles combine meaningful packages of product functionality and access rights required to perform actions relevant to that role.

Assigning a Security Role to a user provides access to product functionality.



To make it easier to understand the licenses required, each Dynamics 365 for Operations security role has a predetermined user type. By assigning security roles to users, you can identify what user license 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, you can ensure they get the functionality they need and determine the user license type that is required.

Notes:

- You can assign multiple security roles to one user. In that case, the highest User license type required will cover all the user rights. Full user licensing is the highest type.
- You can also configure or customize security roles. This may impact the license required for the new or modified roles. Please refer to [Customization/Licensing Requirements](#) for more information about how such customization can impact licensing requirements.
- To get financial use rights, financial report designers need a Operations user license, and financial report viewers need a Team Members license.
- Admin rights apply across Dynamics 365 for Operations, on-premises.
- Operations Activity and Team Members use rights are included in the Operations user licenses.

Customization licensing requirements

Dynamics 365 for Operations, on-premises is fully customizable to provide customers with the right experience for every user. Dynamics 365 for Operations, on-premises 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.

A "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 solution or a separate device.

To make it faster and easier to deploy and determine licensing requirements, these menu items are associated with certain security roles. Note that roles are not the same as job titles.

Each menu item is classified at one of the user license types (from full user access to Team Members). Users with a given license have access to each menu item classified at, or below, that license type. That means that the required license for a given user is determined by the highest classification of the menu items the user will need access to.

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 full user CAL. 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 Dynamics 365 for Operations, on-premises is by assigning multiple Roles to that employee. For example, an employee could be assigned both the customer service representative and a field technician roles. That user can then perform actions associated with both roles and still only need a single user license. Since the customer service rep role is classified at a higher user type (namely, full user license) than the field technician role (which has a Team Members classification), the employee would only need a Operations license to perform actions associated with both roles.

Changing menu items associated with a role

Another way to customize which actions users may perform is by changing which menu items are associated with a role. For example, if you want everyone who is assigned the field technician role to be able to also approve posting of service orders (which is classified as an Operations user license level menu item), you can customize the role to include the "Approve posting of service order" menu item. Because the required license is determined by the highest-level action the user may perform, all users assigned to the field technician role would then require a full user license.

Changing menu items associated with an individual

Further, you may assign specific actions to specific users. Following the example above, if you have 20 employees assigned to the field technician role and you want to allow only five of them to approve posting of service orders, you can assign the "posting of service order" menu item to those five individuals. Those five individuals would then need a full user license, while the remaining 15 employees assigned to the field technician role would only need the Team Members user license.

Creating menu items

You and your partners may also create menu items to fit specific business scenarios. Any new menu items must be mapped to the user license type that best matches the type of use, based on the user license definitions in this guide.

Appendix D: Upgrades, Downgrades, and Migrations

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 Dynamics AX 2012 R3 to Dynamics 365 for Operations, on-premises as shown below upon renewal.

Qualifying Licenses purchased before March 31, 2017

Customers who purchased qualifying licenses before March 31, 2017 may upgrade to and use the following migration license.

Qualifying On-premises License(s)	On-premises Migration License(s)
Dynamics AX Enterprise CAL (User)	Dynamics 365 Operations CAL, or Dynamics 365 Operations Activity CAL, or Dynamics 365 Operations Device CAL
Dynamics AX Enterprise CAL (Device)	Dynamics 365 Operations CAL, or Dynamics 365 Operations Device CAL
Dynamics AX Functional CAL (User)	Dynamics 365 Operations CAL, or Dynamics 365 Operations Activity CAL, or Dynamics 365 Operations Device CAL
Dynamics AX Functional CAL (Device)	Dynamics 365 Operations CAL, or Dynamics 365 Operations Device CAL
Dynamics AX Task CAL (User)	Dynamics 365 Operations CAL, or Dynamics 365 Team Members CAL, or Dynamics 365 Operations Device On-premises CAL
Dynamics AX Task CAL (Device)	Dynamics 365 Operations Activity CAL, or Dynamics 365 Operations Device CAL
Dynamics AX Self Serve CAL (User)	Dynamics 365 Team Members CAL
Dynamics AX Self Serve CAL (Device)	Dynamics 365 Team Members CAL
Dynamics AX Server	Dynamics 365 Operations Server
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 following migration license.

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

License Upgrade Path for Dynamics Price List (DPL)

Customers who are current on their customer service and support plan (e.g., Enhancement Plan) as of June 1, 2017 are entitled to upgrade the licenses from Dynamics AX 2012 R3 to Dynamics 365 for Operations, on-premise as shown below upon renewal.

Qualifying Licenses purchased before March 31, 2017

Customers who purchased qualifying licenses before March 31, 2017 may upgrade to and use the following migration license.

Qualifying On-premises License(s)	On-premises 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)
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 following migration license.

Qualifying On-premises License(s)	On-premises 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) effective May 1, 2017	Dynamics 365 for Operations Activity (Named User), or Dynamics 365 for Team Members (Named User)
Functional Device CAL – Limited Upgrade (Device) effective May 1, 2017	Dynamics 365 for Operations Activity (Named User)
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)
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 Dynamics 365 for Operations on-premises as of June 1, 2017 are entitled to downgrade the software from Dynamics 365 for Operations, on-premise server to Dynamics AX 2012 R3 server.

License Downgrade Path for Dynamics Price List (DPL)

Qualifying On-premises License(s)	On-premises 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), 3 Task User CAL – Limited Upgrade (Named User)
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	Dynamics 2012 Server
4 Dynamics 365 for Operations Server	1 Standard Commerce Core Server (2 Pack)
Dynamics 365 for Operations Activity	Store Server

Appendix E: Additional Resources

Software License Terms (SLT)	https://lcs.dynamics.com/Logon/Legal
Microsoft Dynamics 365	https://www.microsoft.com/dynamics/default.aspx
Dynamics 365 Licensing & Pricing	https://dynamics.microsoft.com/pricing/
Dynamics 365 Licensing Guide	https://go.microsoft.com/fwlink/?LinkId=871590&clcid=0x409
Dynamics AX 2012 Licensing Guide	https://partner.microsoft.com/en-us/asset/collection/licensing-guide-assets#/
Support	https://mbs.microsoft.com/customersource/Global/news-events/news-events/news/Service-Plans

Appendix F: Change Log

Page	Topic	Change	Action	Date
6	Security Roles	Removed	Procurement: Removed external vendor roles 'Vendor admin' and 'Vendor prospect'	July 2021
App D	Upgrades, downgrades, and migration	Added	Paths were inadvertently removed in April version.	May 2021
Various	Language		Minor formatting changes	
various	Format		Updated format	April 2021
4	Asset Management	Added	Use rights	
		New	Additional capacity	

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