



PTC SOFTWARE PRODUCTS LICENSING BASIS FOR VUFORIA PRODUCTS

Scope of this Document

This document sets out the licensing basis and restrictions for each of PTC's Vuforia Licensed Products. In most cases, this document is incorporated into the legal documents governing the Customer's use of software licensed from PTC (collectively the "License Agreement"). In the event of inconsistency between this document and the PTC quote pursuant to which the Customer purchased the licenses (the "Quote"), the Quote shall govern. For example, this document may identify that a product is licensed in a particular way, but if the product name on the Quote specifies a different licensing basis, the Quote shall govern. PTC may update this document from time to time, but each purchase made by the Customer will be governed by the most current version of this document in effect at the time of the purchase.

DESCRIPTION OF COMMON LICENSING BASES

"Designated Server" (DS): Each Designated Server product may only be used on the computer server that is designated by the Customer in connection with the initial installation of the product and that has one unique instance of the applicable installed product application. In the event a computer server is partitioned in any manner (physically, logically or otherwise), the reference in the preceding sentence to "computer server" shall mean each partition of such server, and such Designated Server product may only be used on one of such partitions.

"Registered User" (RU): Registered User products may only be used by a single individual without regard to how often the person uses the license. A license is required for every such individual, regardless of whether the individual is accessing the Licensed Product directly or via an intermediate application. Shared passwords or log-in accounts are not permitted unless the licensing basis for the particular product below specifies to the contrary. The Customer may add and/or substitute from time to time new Registered Users as long as the aggregate number of Registered Users does not exceed at any point in time the number of licenses in effect at such time for that particular product and, provided further, that if a person who was previously a Registered User returns to Registered User status, a new license fee must be paid to PTC at PTC's then current rates unless the licensing basis for the particular product below specifies to the contrary.

"Demo and Test": Products licensed on a "demo and test" or "non-production" basis (or similar designation), such Licensed Products may not be used in a production environment.

Packages (P): The licensing basis for each component of a PTC product package shall be the same as if such component were being licensed separately, except that the components of each package may only be used with the base seat in the package. For example, the Windchill PDMLink and Windchill ProjectLink Registered User Licenses bundled with the Creo Enterprise XE Package are licensed on a Registered User basis and must be assigned in combination to a single Creo user.

Bundles (B): Each PTC Bundle contains several different PTC Licensed Products and the licensing basis for each such Licensed Product may differ from the other Licensed Products included in that Bundle.

LICENSE RESTRICTIONS COMMON TO MULTIPLE PRODUCTS

Subscriptions. A "Subscription" is a on-premise License type that includes a License for a term as specified in the product name, Quote, order agreement or other order documentation, and/or the invoice, and such License includes Support Services during such License Term at no additional fee.



Perpetual Licenses. PTC does not have perpetual license models for most products. Where PTC does sell perpetual licenses, however, and such product includes components that are provided by PTC on a hosted or SaaS basis (e.g., Creo AR Design Share), PTC may discontinue providing such hosted components at any time.

Virtualization Technologies. Although in some cases it may be possible through the use of virtualization technologies to circumvent the license control mechanisms that PTC employs in order to enforce the above licensing schemes, or to circumvent the intent of such licensing schemes, such practices violate the Customer's License Agreement with PTC.

Upgrades. For PTC software licensed as an upgrade from a previous version, the Customer must first be licensed for the software identified by PTC as eligible for the upgrade and Customer must be active on Support Services for such software at the time Customer purchases the relevant upgrade. After installing the upgrade, the software licensed as an upgrade replaces and/or supplements the product that formed the basis of the Customer's eligibility for the upgrade and the Customer may no longer use the original software that formed the basis for the Customer's upgrade eligibility.

Interoperability Tools/Toolkits. PTC interoperability tools (e.g., Pro/TOOLKIT, or J-Link, Pro/Web.Link and application programming interfaces) are provided solely for purposes of enabling the Customer (itself or with the assistance of a third party) to cause the Licensed Products to interoperate with the Customer's other computer systems and programs. Customer shall not distribute to any third party all or any part of any such interoperability tool or use such interoperability tools to develop an integration for distribution to third parties.

Batching. For license types based on numbers of users (e.g., Registered User, Concurrent User, etc.), a License is required for each individual who accesses such Licensed Product or the functionality or data contained therein, whether directly or through a web portal or other mechanism for "batching" or otherwise achieving indirect access to the Licensed Product or such functionality or data. Generic or shared log-ins are not permitted.

Vuforia Products

Vuforia Studio

There are different Vuforia Studio bundles: Starter, Basic, Premium, and Professional. Each bundle includes Vuforia Studio, the Experience Service (licensed on a Designated Server basis), and the Vuforia View Application with Bundle-specific features as set forth in the table below. Vuforia Studio licenses allow the Customer to access and use the PTC's ThingWorx platform for user administration and integration to third-party data sources in order to create Experiences (access does not include ThingWorx Flow); any additional use cases require purchase of a ThingWorx IoT platform edition. Users will be required to download the Vuforia View app from an application store or PTC's software download site. Any additional terms required to be agreed to by users at the time the Vuforia View application is downloaded shall not apply and instead such use will be governed by the License Agreement and this Licensing Basis Table. From time to time, PTC may make certain tools available through the Vuforia Engine account portal as part of the Vuforia Studio license. If Customer accesses such tools, Customer agrees to generate only a reasonable number of Targets. If Customer wishes to generate a large number of Targets, Customer will be required to contact PTC to purchase any additional Targets. Types of Targets include, but not limited to, recognizing real world shapes, images, objects, spaces, or locations in space.

Definitions:

An "Experience" (also referred to as "EXP") is a of a mix of textual, numeric and 3D data that is presented to a user by the Vuforia View application. The Experience may include augmented reality interaction, 2D assets, 3D assets, and/or "live" data, from Things via ThingWorx. Examples of Experiences include, without limitation:

- A service experience to instruct a service technician how to perform a procedure
- A marketing experience to present capabilities of a product to consumers
- A monitoring experience to display live data streaming from a machine



A “View” is a single instance of opening an Experience. An Experience has a definite “entry point” which is invoked by a user action to select the Experience. This may be accomplished by selecting a “bookmarked” or “downloaded” experience, following a scan of a ThingMark, a designated QR code or a deep link. There is no definite “exit point” of the Experience to end the View, other than exiting Vuforia View or requesting another Experience.

A “Public View” is a View consumed in a production environment by a non-Registered User. Any Views consumed by the same user on the same device within the same 15-minute period will be counted as a single Public View. For example, if a non-Registered user accesses an Experience on a device, that will count as one Public View, and the count will not be incremented again for the next 15 minutes, regardless of how many times the same Experience is accessed on that device within that timeframe.

If “Devices” (designated as “DV”) is specified in the part description, Customer may view procedures and/or Experiences concurrently on the number of Devices included in the applicable part description. A “Device” is defined as a tablet, mobile phone, head gear, or computer used by any person who has been authorized to access a Device to view procedures and/or Experiences. Only one username and password may be used with each Device. A Device user cannot author procedures or Experiences. A Device license may only be used for one Device and a user cannot use the same Device license across multiple Devices. There are no limitations on the number of users that can access a Device.

A “Target” is a digital representation of a physical item in the real world, for the purpose of being recognized by computer vision functionality in the Licensed Product to anchor AR content. Types of Targets include, but are not limited to, recognizing real world shapes, images, objects, spaces, or locations in space.

Bundles

Each Vuforia Studio Bundle comes with the entitlements specified in the table below:

	Starter	Basic	Premium	Professional
Registered Users (included, more may be purchased separately)	10	20	200	1,000
Annual Public Views (for non-Registered Users)	2,500	5,000	10,000	50,000
Number of Devices	5	40	n/a	n/a

Notes explaining the above table:

Registered Users: Customers may purchase additional Registered Users for Users who will author and/or consume Views. There is no limit on the number of Views that may be consumed by Registered Users. Registered User licenses are required for persons accessing or consuming an Experience who: (i) are employees or contractors of or otherwise engaged by the Customer in support of Customer’s internal business purposes and (ii) receive login accounts/passwords to the Customer’s Vuforia Studio instance.

Non-Registered Users: Customers may purchase additional Public Views for consumption by individuals who are not Registered Users.

Vuforia Engine & Cloud Services

The licensing basis for each Vuforia Engine Licensed Product is detailed in the table below:

Product Name	Licensing Basis
Vuforia Engine (1)	Per Site
Cloud Recognition Service Standalone	n/a
Model Targets (2)	MDT



Area Targets (3)	AT
Cloud Area Targets (4)(5)	n/a

Each Vuforia Engine plan and Cloud Service allows for the creation of unlimited applications (6) , and includes the features set forth in the table below:

	Vuforia Engine Premium	Vuforia Engine Enterprise	Cloud Services (7)
Standard Model Targets	500/year	Unlimited	n/a
Cloud-Trained Advanced Model Targets	500/year	500/year	n/a
On-Prem Advanced Model Targets	n/a	Unlimited	n/a
Area Targets	500/year	Unlimited	n/a
Cloud Area Targets	Specified on Vuforia Engine pricing page located at https://www.ptc.com/en/products/vuforia/vuforia-engine/pricing	Specified on Vuforia Engine pricing page located at https://www.ptc.com/en/products/vuforia/vuforia-engine/pricing	Specified in the Quote
Cloud Image Targets	1,000/month	1,000/month	Specified in the Quote
Cloud Image Recos	1,000/month	1,000/month	Specified in the Quote

- (1) A “Site” means a singular customer building or set of connected buildings where the software is being used. In the case of connected buildings there must be no physical barriers between the operations themselves, or the process flow of materials.

In addition, Customer is required to have a License for each Site where the application (developed with Vuforia Engine) will be deployed and/or used by Customer’s employees, including affiliate and/or any third-party sites. Where the Customer is an agency developing an application on behalf of a client, Customer would require a License for each client Site where the application will be deployed and used by employees of the client. If Customer is developing a consumer-focused application, a License is required only for a Customer Site; end-users accessing the application from their own locations do not need additional License.

- (2) Model Targets (MDT) - Model Targets are Targets created from 3D models. Model Targets may only be deployed with a Vuforia Engine Premium license for which it was purchased as specified in the Quote.
- (3) Area Targets (AT) – Area Targets are Targets that are created from the 3D scan of an environment using a supported 3D scanner. Area Targets may only be deployed with a Vuforia Engine Premium license for which it was purchased as specified in the Quote.
- (4) Cloud Area Targets – A Cloud Area Target is an Area Target dataset hosted by PTC and streamed in portions to devices on demand. Cloud Area Targets are licensed based on allotments of square meters stored and streamed per month. Cloud Area Targets may only be deployed with a Vuforia Engine Premium license or Vuforia Engine ISV license for which it was purchased as specified in the Quote.
- (5) Square Meters – Square Meters is defined as a measurement of the floor space represented by the Cloud Area Target as determined by the Cloud Area Target Cloud Service. The actual real-world measurement of the floor space may differ from the square meter value determined by the product due to how the space was scanned, the portion of the scan included in the Cloud Area Target dataset, and/or the scanning technology used.



- (6) A Customer is not permitted to transfer the Vuforia Engine license or any license keys to a third-party but may transfer ownership of an application to such third-party.
- (7) For any Cloud Service, Customer will be required to pay any overage fees if Customer exceeds the applicable allowances.