PTC SaaS
OFFERING SPECIFIC PROVISIONS

About this Document

This document sets out various terms and conditions that are specific to defined SaaS offerings from PTC. This document supplements the more general terms set forth in the PTC SaaS Services Terms and Conditions (the "General Terms and Conditions"). In the event of inconsistency between this document and the PTC quote(s) pursuant to which the Customer purchased the Services (the "Quote"), the Quote shall govern. PTC reserves the right to change the terms of this document upon no less than sixty days' notice, with such changes effective upon the next renewal of the Customer's term; provided that Customer may opt to not renew its contract in accordance with the non-renewal terms in the Quote.

Notwithstanding the above, Vuforia Cloud Recognition Services are governed by the license agreement at https://www.ptc.com/en/documents/legal-agreements/on-premise-license-agreements.

Definitions/Provisions Applying to All Offerings

Common Definitions

The following terms have the following meanings. Other capitalized terms used in this document but not defined herein are as defined in the General Terms and Conditions.

"**Active Daily User**" means a unique User who accesses the Service at any time during a 24-hour calendar day, using the time zone set for the Service.

"**Monthly Active User**" means a unique User who accesses the Service during a particular calendar month.

"**Registered User**" means an individual, named registered User on a password basis. 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; provided that, no new license fee shall be due for Vuforia SaaS Offering Registered Users.

"**Service End Date**" means the date, once it is known, when the Services term will expire or terminate. That is, the Service End Date will be known when a non-renewal notice has been given or a party has given notice that it will terminate the Services term in accordance with the termination provisions of the General Terms and Conditions.

For the sake of simplicity, references in this document "SaaS" means both SaaS and Managed Services. See the General Terms and Conditions for definitions of these two terms.

General Exclusions

PTC Management of Software Applications on a Customer Infrastructure

All components for PTC Managed Services offerings and SaaS offerings are hosted by PTC on PTC's infrastructure and unless specifically agreed in writing, PTC does not manage offerings or parts of offerings on the Customer's infrastructure, whether Customer IT centers, Customer leased private data centers, or Customer accounts on public infrastructure such as Amazon Web Services or Microsoft Azure platforms.

System Performance

End user performance testing is not included in any Service. PTC will make commercially reasonable efforts to optimize performance of hosted environments and accessibility to the Internet. However, PTC does not control Customer's access to external internet (WAN), nor does PTC control Customer's practices for data creation that may impact the offerings' overall responsiveness.

Customer Use of Non-production Environments

Any non-production environments purchased cannot be used for production purposes. Identified production environments shall be used for production data and access, and are the only environments where the uptime SLAs will apply. Non-production environments (e.g., development, integration, QA or other name may apply) do not include comparable backup, disaster recovery and other services that apply to production environments.

Custom Implementation Services

The services do not include post-installation implementation services such as business configuration and customization of a deployed solution specific to a Customer unique requirement set.

Security Exclusions

Execution of a Customer security audit or review is excluded from all offerings unless paid-for as an additional service. Depending on the availability of PTCs security resources, PTC may not accommodate all requests for paid audit/review engagements.

Data Migration/Loading

Services to provide data migration/loading into the PTC SaaS environments (e.g., materials and document files) are not included unless specifically referenced in the Quote.

Single Sign On

Setup and implementation of single-sign-On services are not included unless specifically purchased via an available PTC offering or otherwise agreed in writing.

Support for Regulated Industries

Regulated industries such as medical device manufacturing and military defense product manufacturing may have unique requirements for defining, tracking and managing access, security and changes to solution environments, and/or for FDA validation. For some offerings, PTC can support customers who must adhere to these requirements, but entitlement to this type of support must be explicitly purchased and is otherwise excluded. See below for details.

Overage

Unless specified below for a particular offering, the following items are subject to overage fees (at the rates specified in the Quote) if Customers exceed their allowances. Overage is, unless specified for a particular offering, measured and billed monthly.

- Number of Users
- Data/Storage
- Named Service Requests
- Inventory under management (for Servigistics offerings)

Service Requests

Each offering entitles Customers to a particular number of Named Service Requests per calendar year. For most offerings, the number is twelve, but for offerings that are supplemental to other offerings (such as ThingWorx Navigate), there may be additional Service Requests provided. Additional Named Service Request entitlements can be purchased. Service Requests are described in PTC Support Services Terms and Conditions.

Named Service Requests will deprecate Customer's entitlement. The following Service Request types are specifically excluded from consumption metrics relating to Named Service Requests and will not deprecate the entitlement:

- Deployment of a required security patch either for PTC applications or underlying infrastructure
- Installation of PTC provided solution components purchased as part of any PTC offering
- Information requests relating to solution consumption or in support of an incident or triage activity
- Assistance with User Administration for actions that cannot be accessed directly by the Customer in the secured Production Environment

If a Customer exceeds the number of entitled Named Service Requests, PTC will contact the Customer to give Customer the opportunity to accept or decline an overage fee. Customers will be provided a monthly report to understand their consumption to date.

Data Export (not applicable for Vuforia SaaS Services, see the specific Vuforia SaaS Offering for Data Export)

Once the Service End Date is known, the Customer can request up to two data exports: (1) prior to Service End Date an export for purposes of testing the input of that data into Customer's new system, and (2) final export at Service End Date. The Customer shall coordinate such requests with PTC. The data export includes the information required to redeploy the as-is software configuration in another environment. The file format(s) that are available for each offering are as set forth in the offering-specific sections below.

Other than as set forth above, export and snapshot of Data (e.g., for Customer's long-term retention needs) are not offered as part of the standard PTC offering. Customer may, however, contract with PTC for additional non-standard data export for additional fees.

PTC will retain Customer's Data for approximately 30 days following the last extraction after which time it will be destroyed. One copy of archived data can be provided during this 30-day period upon customer request.

PTC Extended SaaS Services Offering ("ESS")
(Formerly known as "Extended Cloud Services")

Introduction

The ESS Service provides for the deployment of a Customer's customizations and custom-developed integrations that communicate with the Service (collectively, "Customizations"). ESS does not include validation, modification, enhancement or repair of these Customizations.

Solution Scope

As part of ESS, PTC will provide:

- Application Customization installation
- verification that Customizations have installed

ESS does not provide for business use case verification or feature specific verification. Nor does it include troubleshooting or debugging of Customizations. PTC is not responsible for connectivity issues or downtime related to or caused by any Customizations.

Offering Basis

- ESS is contracted on a per Customization basis.
- PTC has the right to refuse any Customization. If PTC refuses a Customization, PTC will inform the Customer of the reason(s) to enable the Customer an opportunity to provide an updated release.
- It is important to note that the following items are not included as part of ESS:

  - Code changes required to resolve an issue or introduce new functionality
  - Customization changes following upgrades or maintenance releases or standard service enhancements
  - Data modifications
  - Customization development or consulting
  - Monitoring of Customizations
  - Services for Customizations not deployed within a PTC hosted application

- Upon Customer updating a Customization, PTC has the right to review the Customization to ensure it falls within the agreed scope of the existing Customization. If the Customization has expanded beyond the scope of the initial agreed upon baseline, PTC may require additional ESS fees to support the expanded scope.
- Upon upgrade of the PTC offering, Customer is responsible for upgrading any existing Customizations if there are any issues found during the upgrade process.

Solution Service Model

To utilize ESS, Customer is expected to provide the following components for each Customization.

- Source code
- Test plans, test cases and test results covering all use cases

PTC will analyze the documentation and source code for security and performance issues. PTC can refuse any Customization that is considered a risk in terms of performance, maintainability and sustainability of the solution, operation or security.

Termination of Service

Once the Service End Date is known, the Customizations will be removed from the Hosted Service by following PTCs standard Change Control process. If ESS Termination is associated with a related Service termination, Customer will follow the termination process for that related Service. No ESS specific termination clause will apply.

Federal and Defense Add-ons

Introduction

The PTC SaaS Federal and Defense offering is for those Customers who require their solution to adhere to US Federal requirements for ITAR, ITIL, DFARs, CMMC, FedRAMP or IL2/IL4/IL5 certified service. This offering is sold in some cases as an add-on to an underlying offering (e.g., Windchill PLM SaaS). Whether sold as an add-on or as a complete offering, the standard terms of the underlying offering apply in addition to those stated here. Where discrepancies exist, the terms in this Federal and Defense offering description will supersede. The availability of specific software product versions may vary from PTCs general software support version matrix.

Solution Scope:

The Federal and Defense offering is available as a standard service package.

- Solutions hosted as part of this service are managed in accordance with the required regulations and all required upgrades and modifications will be applied as needed to maintain certified status. Depending on the nature of any changes, Customer may be required to participate in testing, adjusting and accepting these changes on a planned maintenance schedule set by PTC. Such changes may include an upgrade of PTC software in order to maintain overall solution compliance and third-party compatibility.

The following items are included in the standard offering for FedRAMP / IL2:

- PTC provided certification for FedRAMP where PTC will maintain an active FedRAMP authorization per regulations listed herein:
  - Cybersecurity Maturity Model Certification (CMMC)
  - DFARS 252.204-7008: Compliance with safeguarding covered defense information controls
  - DFARS 252.204-7012: Safeguarding covered defense information and cyber incident reporting
  - DoD Cloud Computing Security Requirements Guide V1 R 3
  - FAR 52.204-21: Basic Safeguarding of Covered Contractor Information Systems
  - Federal Information Security Management Act (FISMA)
  - Federal Risk and Authorization Management Program (FedRAMP)
  - NIST SP 800-171: Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations
  - NIST 800-53 r4: Security and Privacy Controls for Federal Information Systems and Organization

The following items are included in the standard offering for IL4 / IL5:

- For DoD SaaS customer environments, PTC will maintain an active Defense Information System Agency (DISA) authorization at the level appropriate to the requirement, to provide the relevant cloud computing services in accordance with the DISA Cloud Computing Security Requirements Guide (SRG) version in effect at the time and comply with the regulations listed herein:
  - DFARS 239.76: Cloud Computing
  - DODI 8510.01: Risk Management Framework (RMF) for DoD Information Technology
  - DoD Cloud Computing Security Requirements Guide V1 R 3
  - DoD Security Technical Implementation Guides (STIGs). In delivery of the service, PTC will comply with the following access restrictions:
    - o Access to Controlled Unclassified Information (CUI) must be limited to U.S. Persons that have (1) a current U.S. security clearance (minimum interim SECRET clearance), or (2) have been the subject of a favorably completed National Agency Check with Inquiries (NACI), or (3) have been the subject of a favorably completed background check pursuant to a background check program submitted to Customer and approved by the Government.

    - o Personnel with dual citizenship that have an active U.S. security clearance (interim Secret or higher) may be permitted access to Controlled Unclassified Information (CUI). Personnel with dual citizenship that do not have an active U.S. security clearance (interim Secret or higher) are not authorized access to CUI unless a request is submitted to Customer and approved in writing by Customer.

Offering Basis

The following terms describe PTCs commitment and governing practices for the Federal and Defense offering.

- PTC's SaaS Services business unit ("PTC SaaS Services") is a SaaS CSP and is FedRAMP Authorized at the Moderate Baseline. See FedRAMP.gov for more details about this.

- PTC SaaS Services meets all NIST 800-171 security control requirements required by DFAR 252.204-7012 and CMMC.

- PTC SaaS Services is audited annually by a FedRAMP and DoD approved third party assessment organization (3PAO) to ensure compliance with the FedRAMP Moderate Baseline and with the DISA SRG version in effect at the time.

- PTC SaaS Services will comply with the requirements of DFARS 252.204-7012(c)-(g) for cyber incident reporting, malicious software, media preservation and protection, access to additional information and equipment necessary for forensic analysis, and cyber incident damage assessment.

- PTC SaaS Services will ensure that all data hosted in the PTC FedRAMP and DoD Clouds remains in the United States, districts, territories, and outlying areas of the United States, and hence ensuring that the data remain under U.S. jurisdiction at all times.

- All PTC employees or authorized third parties in roles with access to DoD CUI categorized as critical sensitive will be U.S. Citizens and subject to a satisfactory Single Scope Background Investigation or other background investigation for high risk.

- All PTC employees or authorized third parties in roles with access to DoD CUI categorized as moderate risk positions or non-critical designations will be U.S. Citizens and subject to a National Agency Check with Law and Credit or equivalent.

The items below are responsibilities of the Customer:

- Customer is responsible for ensuring that only authorized personnel with current U.S. government security clearances or other authorizations, as required, are granted access to these Services.

- Customer is responsible for ensuring that any data held in these systems is appropriate given the nature of the Service, and PTC is not responsible for determining the appropriate access policies for Customer personnel or data. For example, without limitation, PTC's Services are not suitable for classified information or documents, and it is Customer's responsibility to ensure that such information/documents are not included in the Services.

Allowable Configurations

In addition to the allowable configuration terms defined for the relevant solution specific offering, the following applies for the Federal and Defense offerings:

Category	Capability
Configurations and actions not permitted for PLM	Customers may not be granted server level access to application environments for any reason.
	Integrations to third party applications that are not contained in a FedRAMP certified environment are not allowed.
	Customers are responsible to document and provide PTC with a validated code package that can be used to apply customizations and integrations on the secured production environment.
	The following add-on options available in the standard commercial offer are not permitted for Customers purchasing this Federal and Defense Add On Service. • Additional PTC hosted locations for Remote File Vaults (Replicas) • Additional services for sFTP Server or similar external file management. • Third party software extensions for CATIA WGM and Autodesk Inventor WGM • COGNOS for reporting • ECAD integrations & publishing • WinCOM extension for Windchill • CREO/Windchill AR Designshare

Windchill SaaS Offerings

Windchill Plus

Introduction

This offering provides Customers with a SaaS PTC Windchill environment. It includes a comprehensive set of PLM capabilities described below and supports integration with external systems (such as ERP and CRM).

Solution Scope

Windchill Plus is available as a standard service package with optional environments/services that can be purchased separately.

Offering Basis

- Windchill Plus is contracted on a "Monthly Active User" basis.
- There are defined types of Registered User profiles that may be purchased: **Viewer, Contributor, Author**. Additional functionality role-based license types may be added to the Author user profile. Each profile grants the assigned User access only to the functionality entitled by that profile. Customers are required to allocate Users to license profiles within the Windchill production environment. Failure to appoint Users to appropriate license profiles may result in overage fees. Users may not be retroactively changed from one license profile to another.
- In some cases, it may be necessary for PTC to install and run certain Windchill compatible third-party software so the Service can process Data (e.g. data from certain non-Creo CAD systems, PTC Partner created applications, and/or document format translators). In such cases, for PTC to install and run such third-party software for Customer, it must be specifically agreed in the Quote and the Customer will be required to secure licenses and authorization for PTC to host such third-party software.
- PTC is not obligated to host for Customer any customization or custom applications unless specifically agreed in the Quote that PTC will host the same as ESS.
- Customers are responsible to configure their identity and access management integration and SSO experience using the provided PingFederate service as the central authentication server (CAS).
- The PTC SaaS Engagement Guide located at www.ptc.com/en/support/cloud-engagement-guide identifies the configurations, customizations and integrations that are permitted. Configurations, customizations and integrations that are not identified in such document are not permitted.

Publishing Entitlements

Customers are entitled to publishing capability for supported Microsoft Office applications (as specified in the support matrix for the applicable Windchill Plus version, which is located at www.ptc.com/support/release-advisor) with a limit of 300 publish jobs per Author user per month (measured across all Author users).

Customers are entitled to publishing capability for supported CAD applications (as specified in the support matrix for the applicable Windchill Plus version, which is located at www.ptc.com/support/release-advisor) with a limit of 125 publishing jobs per Designer user per month (measured across all Designer users).

Additional publishing jobs used in excess of this limit will be billed as overage on a contract-year basis.

For customers that purchase a "SaaS Windchill Migration Environment," additional publishing demand caused by the migration will count against the limit to the extent that the document(s) are not the latest released versions of such document(s). For example, if Customer has publishing jobs caused by a migration and such jobs are the latest versions of the applicable documents, such publishing jobs will not count towards the limit.

Data Storage Entitlements

Customers are entitled to the data storage on a per Registered User basis depending on the role (measured across all licenses), as specified in the table below. In addition, Customer can purchase incremental multiples of One Terabyte of storage as required. The total amount of storage a Customer is entitled to is shared across all PLM SaaS and Managed Services environments (production and non-production) that have active PTC subscriptions and allocated by PTC to support the Customer's usage requirements.

User Type	Data Storage Allotment per User
Author (with Designer)	200 GB
Author	20 GB

Contributor	2 GB
Viewer	0 GB

Data Export Formats

For authorized Windchill data exports, the data export formats will include applicable items from the following: Database schema export, Directory LDIF export or similar user list export, Enterprise LDAP LDIF export, external file vault(s) contents.

Windchill PLM SaaS

Introduction

This offering provides Customers with a SaaS PTC Windchill environment. It includes a comprehensive set of PLM capabilities described below and supports integration with external systems (such as ERP and CRM).

Solution Scope

Windchill PLM SaaS is available as a standard service package with optional services that can be purchased separately. Windchill PLM SaaS Standard Services include:

- Windchill Enterprise Packages (Base, Advanced, Premium)
- Windchill Role Based Add-ons can be purchased in addition to an enterprise package
- Extended PLM Add-ons can be purchased in addition to an enterprise package
- A single production instance and a single non-production instance
- CAD publishing capacity for up to 100 Authors of Creo on the production instance and up to 50 Creo Test Authors on the non-production instance. Additional CAD publishing capacity can be purchased.
- Storage allocation of 1024 GB (1 TB) shared across all purchased PLM environments.
- A total of 12 Named Service Requests per calendar year across all purchased environments.
- Service Management engagement as described in the Service and Support Terms and Conditions

Offering Basis

- Windchill PLM SaaS is contracted on a "Monthly Active User" basis.
- There are defined types of Registered User profiles that may be purchased: **Windchill Base, Advanced or Premium**. Each profile grants the assigned User access only to the functionality entitled by that profile. Customers are required to allocate Users to license profiles within the Windchill production environment. Failure to appoint Users to appropriate license profiles may result in overage fees. Users may not be retroactively changed from one license profile to another.
- In some cases, it may be necessary for PTC to install and run certain Windchill compatible third-party software so the Service can process Data (e.g. data from certain non-Creo CAD systems, PTC Partner created applications, and/or document format translators). In such cases, for PTC to install and run such third-party software for Customer, it must be specifically agreed in the Quote and the Customer will be required to secure licenses and authorization for PTC to host such third-party software.
- PTC is not obligated to host for Customer any customization or custom applications unless specifically agreed in the Quote that PTC will host the same as ESS.
- The PTC SaaS Engagement Guide located at www.ptc.com/en/support/cloud-engagement-guide identifies the configurations, customizations and integrations that are permitted. Configurations, customizations and integrations that are not identified in such document are not permitted.

Data Storage Entitlements

Customers are entitled to the standard data storage as described above in the Solution Scope. In addition, Customer can purchase incremental multiples of One Terabyte of storage as required. The total amount of storage a Customer is entitled to is shared across all PLM SaaS and Managed Services environments (production and non-production) that have active PTC subscriptions and allocated by PTC to support the Customer's usage requirements.

Data Export Formats

For authorized Windchill data exports, the data export formats will include applicable items from the following: Database schema export, Directory LDIF export or similar user list export, Enterprise LDAP LDIF export, external file vault(s) contents.

SaaS PLM Implementation Phase Bundles

(Applies to part numbers SAS-CPE5619 and SAS-CPE5620)

Introduction

This offering provides Customers with a pre-Production SaaS Windchill or Windchill with Navigate service. It includes the set of capabilities described below, and allows some level of customization and integration with external systems such as ERP.

Solution Scope

Windchill SaaS Standard entitlement includes:

- Use of Windchill (SAS-CPE5620), or Windchill with Navigate (SAS-CPE5619) capabilities for 20 Registered Users of each of the following products:

  - SaaS Windchill Base
  - SaaS Windchill Advanced
  - SaaS Windchill Premium
  - SaaS Windchill Multi-CAD Data Management and Visualization
  - Thingworx Navigate View (SAS-CPE5619)
  - Thingworx Navigate Contribute (SAS-CPE5619)
  - A single non-production Development instance of Windchill (SAS-CPE5620), or Windchill with Navigate (SAS-CPE5619)
  - A single pre-production QA instance of Windchill (SAS-CPE5620), or Windchill with Navigate (SAS-CPE5619)
  - A visualization (worker) service for your choice of allowed CAD
  - A PingFederate instance that must be used in IAM configuration
  - Storage allocation of 1024 GB (1 TB) shared across all environments
  - A total of 12 Named Service Requests per calendar year across all environments

Offering Basis

- SaaS PLM Implementation Phase Bundle is contracted on a fixed basis. No overages are applicable and additional users are not permitted.

- Each included user profile grants the assigned user access only to the functionality entitled by that profile. Customers are required to allocate users to license profiles within the Windchill environment. Failure to appoint users to appropriate license profiles may result in poor experience and/or incorrect configuration that will behave incorrectly when pushed to production.

- Customers are responsible to configure their identity and access management integration and SSO experience using the provided PingFederate service as CAS.

- CATIA is not allowed as a CAD publishing option.

- PTC will provide the following support as part of this service: IaaS monitoring, Security Intrusion monitoring, CPS, nightly backups, restore from backup.

- PTCs standard production level service commitments such as SLAs and RTO/RPO and incident SLTs do not apply. Only non-production incident SLTs apply for this offering.

- Data export is not included if the customer terminates this agreement.

Allowable Fee-based Add-ons:

- Role-based SaaS User add-ons
- Additional storage
- Additional non-production instances for Windchill (SAS-CPE5620), or Windchill with Navigate (SAS-CPE5619)
- Additional publishing services (workers)
- Remote file vault (PTC Hosted)

PTC Windchill Product Quality SaaS

Introduction

    Windchill Product Quality (WPQ) SaaS helps customers bring medical products to market using Windchill PLM. A Validation Accelerator Package (VAP) is included and covers the use of standard WPQ processes. This offering can be combined with other offerings but in doing so, a separate agreement will need to be established to cover additional Validation scope. Standard terms of the Windchill PLM SaaS offering apply in addition to those stated here. Where discrepancies exist, the terms in this WPQ SaaS offering description will supersede.

Solution Scope:

    Windchill Product Quality SaaS is available as a standard service package with optional services that can be purchased separately. The following items are included in the standard offering:

- WPQ Preconfigured processes for Design Control, Document Control, CAPA/SCAR, Non-conformance Management, Complaint Management

- Validation Accelerator Package prepared for the WPQ preconfigured processes

- PTC-provided evidence in support of Installation Qualification (IQ) covering the scope of this standard offering only.

- Included Windchill PLM SaaS features:

  - Core PDM (e.g. versions, workflows, content management & access control)
  - Visualization (3D, 2D)
  - Project Planning/Execution
  - Document Management
  - Business systems Integration
  - Change Management
  - BOM Management
  - Creo View Adapter for PDF

- A single production instance and a single non-production instance

- CAD publishing capacity for up to 100 Authors of Creo on the production instance and up to 50 Creo Test Authors on the non-production instance. Additional CAD publishing capacity can be purchased.

- A total of 12 Named Service Requests per calendar year across all purchased environments.

- Service Management engagement as described in the Support Terms and Conditions

Offering Basis:

- WPQ SaaS is licensed based on a Monthly Active User basis. A commitment of a minimum of thirty Author Users is required for this offering.

- There are two types of Licenses: Authors and Contributors. A Contributor User may not be logged into the Service for more than forty hours per month and is subject to limitations in the Service on functionality that they can access.

- Third-party CAD publishing must be quoted separately for each additional CAD tool requiring automated publishing of viewables. Customer is required to secure licensing for third party CAD tools to support the CAD publishing functions.

- In addition to the specific Medical Device pre-configured processes, the offer includes standard PLM capabilities such as document management, change management and workflow management. These capabilities can be used to enable the WPQ system but the Customer must plan to configure and validate these capabilities, as this is not included in the offering.

- The WQM SaaS offering supports additional configuration, customization, and integration capabilities that are available in Windchill and described in the Windchill PLM SaaS offering. In case of customizations and integrations, the Customer will be required to pay to PTC additional Extended SaaS Service (ESS) fees for run-time support of such customizations and integrations. Any change to the WQM software's intended use is likely to require additional validation effort and may incur additional validation fees that will be payable to USDM.

Data Storage Entitlements:

    Each Author User is entitled to use up to 30 GB of storage. Additional storage can be purchased.

Windchill FlexPLM SaaS and Other Retail SaaS Offerings

Introduction
> This offering provides Customers with a SaaS Windchill FlexPLM environment. It includes the set of capabilities described below, and supports some levels of customization and integration with external systems such as ERP and CRM.

> Standard terms of the Windchill PLM SaaS offer apply in addition to those stated here. Where differences exist, the terms in this Windchill FlexPLM SaaS offering description will supersede.

Solution Scope
> Windchill FlexPLM SaaS is available as a standard service package with optional environments/services that can be purchased separately. Windchill FlexPLM SaaS Standard entitlement includes:

- Windchill FlexPLM enterprise packages (FlexPLM SaaS User or FlexPLM External User)

- A single production instance of Windchill FlexPLM SaaS and a single non-production instance of Windchill FlexPLM SaaS

- Storage allocation of 1024 GB (1 TB) shared across all purchased PLM environments

- A total of 12 Named Service Requests per calendar year across all purchased environments

- Service Management engagement as described in the PTC Support Services Terms and Conditions

Offering Basis
- Windchill FlexPLM SaaS is contracted on a Monthly Active User basis.

- There are defined types of profiles that may be purchased: FlexPLM SaaS User, FlexPLM SaaS External User. Each profile grants the assigned user access only to the functionality entitled by that profile. Customers are required to allocate or confirm Authorized Users to license profiles within the Windchill FlexPLM production environment. Failure to appoint Users to appropriate license profiles may result in overage fees. Users may not be retroactively changed from one license profile to another.

- The FlexPLM SaaS External User (also known as "Supplier") may be assigned only to Users who are vendors, third parties and others external to the Customer and its affiliates ("External Users"). External User licenses may be reassigned to another External User at no additional license fee, except that an External User license may not be used by more than one External User during any calendar month.

- FlexPLM SaaS Users and FlexPLM SaaS External Users also receive entitlements to use certain role-based ThingWorx-based applications. These applications may only be used for the following purposes:

  - to execute applications to view, print, create, and/or update information from solutions sold by PTC and delivered through the components bundled with the role-based applications.
  - to leverage the included ThingWorx application only for the sole purposes of accessing FlexPLM data as applicable to the role-based applications and configuring details required for the role-based applications.

- In some cases, it may be necessary for PTC to install and run certain Windchill compatible third-party software so the Service can process third party data. In such cases, for PTC to install and run such third-party software for Customer, it must be specifically agreed in the Quote and the Customer will be required to secure licenses and authorization for PTC to host such third-party software.

- PTC is not obligated to host for Customer any customization or custom applications unless specifically agreed in the Quote that PTC will host the same as ESS. A "Third-party Integration" is a custom developed integration that communicates with a PTC application. PTC is not responsible for connectivity issues or downtime related to the integration of any non-PTC Hosted applications.

- Setup and implementation of Single-sign-On (SSO) services are not included unless specifically purchased via an available PTC offering or otherwise agreed in writing.

- FlexPLM is built on Windchill. Access and use of the underlying Windchill capabilities that are not in support of FlexPLM data is excluded from entitlements of the FlexPLM SaaS User and FlexPLM SaaS External User license.

- Windchill reporting capabilities requiring the use of Cognos (including Windchill out of the box reports) are not included in the standard FlexPLM SaaS offering. Customers intending to use this capability will be required to separately purchase such reporting functionality.

- The PTC SaaS Engagement Guide located at www.ptc.com/en/support/cloud-engagement-guide identifies the configurations, customizations and integrations that are permitted. Configurations, customizations and integrations that are not identified in such document are not permitted.

Data Export Formats

For authorized Windchill FlexPLM data exports, the data export formats will include applicable items from the following: Database schema export, Directory LDIF export or similar user list export, external file vault(s) contents.

Allowable Fee-based Add-ons

In addition to the allowable configuration terms defined for Windchill PLM SaaS, the following applies for Windchill FlexPLM SaaS:

Category	Capability
Customizations, Integrations and offering extensions (*additional fees apply*)	Separate fees are required for allowing customizations beyond supported configurations in a production environment. PTC does not develop or maintain customizations or integrations on behalf of Customer unless purchased separately. See terms for ESS (Extended SaaS Services) for more information.
	Customers are responsible to document and provide PTC with a validated code package that can be used to apply customizations and integrations on the secured production environment.
	The following add-on options are applicable to Windchill FlexPLM SaaS. • Additional storage • Adobe Integration Adapter and Adobe Illustrator Design Integration • Additional PTC hosted locations for Remote File Vaults (Replicas) • Additional non-Production environments of Windchill FlexPLM • Additional services for Infrastructure and Networking such as managed VPN connections, Encryption at Rest, sFTP Server, Vault storage capacity and IP Whitelisting. • 3D Browzwear Adapter & 3D Browzwear Plug-in • FlexPLM 3D Optimization Services • Thingworx Retail Connector (TRC) for system integrations to share data • Canvas and relevant add-ons • Management of existing application customizations and integrations (subject to restrictions described above). Does not include bug fixes or enhancements unless specified.

Data & Devices

Data Storage Entitlements

Customers are entitled to the standard data storage as described in the Solution Scope. In addition, Customer can purchase incremental multiples of One Terabyte of storage as required. The total amount of storage a Customer is entitled is shared across all FlexPLM SaaS and Managed Services environments that have active PTC subscriptions and allocated by PTC to support the Customer's usage requirements. Smaller volumes are assigned to non-production systems under the assumption these are not expected to support complete data sets or user-base constituents.

Retail IoT ADK

Introduction

This offering provides Customers with a SaaS Retail IoT ADK environment. It includes connectivity to a PTC SaaS Services Retail PLM service.

Solution Scope

Retail IoT ADK SaaS is available as an expansion to a PTC SaaS FlexPLM SaaS or Managed service. Retail IoT ADK SaaS Standard entitlement includes:

- Entitlement to Retail IoT ADK Base solution

- A single production instance and a single non-production instance

- Integration between a single Retail IoT ADK and a single PTC SaaS managed FlexPLM for each included environment.

Offering Basis

- Retail IOT ADK is contracted on a "Monthly Active User" basis.

- Every Retail IOT ADK User will also require a Windchill FlexPLM User license (either External SaaS or Registered User)

- It can be used to only connect to PTC's FlexPLM product and other enterprise systems (e.g., Oracle ERP, SAP, CRM systems, etc.). It may not be used to access data from devices – which can include but is not limited to connected products, wearables, production machinery, and physical assets – and any edge servers or services that devices are connected to.

- It also may not be used to connect to manufacturing systems, processes, and/or operations belonging to the Customer's internal production facilities or the Customer's suppliers' production facilities.

Adobe Integration Adapter and Adobe Illustrator Design Integration

Introduction

This offering provides Customers with a connection from Adobe Illustrator application installed on a user's desktop to FlexPLM Server via a locally installed Adobe Illustrator Design Integration. Data created in the Adobe Illustrator can then be published to the FlexPLM SaaS instance via the Adobe Integration Adapter.

Solution Scope

The Adobe Illustrator (AI) Adapter is available as an add-on package to FlexPLM SaaS that includes:

- Adobe Illustrator Design Integration Option (One license for every user of the Integration)

- A single Adobe Integration Adapter instance configured to integrate with the production instance of a FlexPLM SaaS instance subject to agreed SLAs and SLTs as described in the PTC Support Terms and Conditions.

- The Adobe Integration Adapter instance includes components such as Database, Web Server, Adobe Illustrator and monitoring software. Supported versions of Adobe Illustrator are noted in the support matrix for the applicable FlexPLM software version located at www.ptc.com/support/release-advisor.

Offering Basis

- The Adobe Integration Adapter is sold as each and only as an add-on to existing FlexPLM SaaS environments.

- The Adobe Illustrator Design Integration is a per user license required for each FlexPLM SaaS user that requires the integration

- Users of Adobe Illustrator Design Integration also have to be FlexPLM SaaS Users

- Customers are required to deploy and maintain (including upgrades) compatible version of Adobe Illustrator within their user environment per the support matrix located at www.ptc.com/support/release-advisor.

- PTC SaaS will perform quarterly audits of Customer usage and Customer will be required to purchase additional User licenses based on actual consumption.

3D Browzwear Adapter and 3D Browzwear Plug-in

Introduction

This offering provides Customers with a connection from their Browzwear applications (VStitcher or Lotta) via a locally installed 3D Browzwear Plug-in to communicate with the FlexPLM SaaS system. Data created in the Browzwear applications can then be stored in the FlexPLM system.

Solution Scope

The Browzwear 3D Server Adapter is available as an add-on package to FlexPLM SaaS that includes:

- 3D Browzwear Plug-in for Browzwear's VStitcher or Lotta (one license for every user of the 3D Browzwear integration)

- A single 3D Browzwear Adapter enabled on the production instance of a SaaS FlexPLM system subject to agreed SLAs and SLTs as describe in the PTC Support Terms and Conditions.

- A Browzwear 3D Server Adapter on each additional non-Production instance of a SaaS FlexPLM system.

- Supported versions of Browzwear's VStitcher and Lotta are noted in the support matrix for the applicable FlexPLM software version located at www.ptc.com/support/release-advisor.

- One additional Terabyte of data storage entitlement on the production instance of a SaaS FlexPLM system.

Offering Basis

- The 3D Browzwear Plugin is sold as each (per-user license) and only as an add-on to existing FlexPLM SaaS or Managed environments.

- Users of 3D Browzwear Plugin also have to be FlexPLM SaaS Users

- Customers are required to deploy and maintain (including upgrades) compatible version of Browzwear's VStitcher or Lotta within their user environment per the support matrix located at www.ptc.com/support/release-advisor.

- PTC SaaS will perform quarterly audits of Customer usage and Customer will be required to purchase additional User licenses based on actual consumption.

ThingWorx Retail Connector (TRC)

Introduction

This offering provides Customers with a SaaS ThingWorx Retail Connector environment. It includes connectivity to a PTC SaaS Services Retail PLM service (SaaS or Managed) and supports integration with external on-premise and cloud systems such as ERP and CRM.

Solution Scope

TRC SaaS is available as a standard service package with required and optional services that can be purchased separately: The solution includes software entitlement choices, a bundle of standard cloud service entitlements, and add-on cloud services to meet Customer specific requirements. It is sold as an expansion to a PTC SaaS FlexPLM service.

TRC SaaS Standard entitlement includes:
- Entitlement to TRC Base solution

- A single production instance and a single non-production instance

- Integration between a single TRC and a single PTC SaaS managed FlexPLM for each included environment.

- High Speed storage allocation of 250 GB shared across any purchased environments

- Service Management engagement as described in the PTC Support Services Terms and Conditions and offered at the same level as entitled for PTC SaaS PLM

- The ThingWorx Retail Connector (SAS-2253-F) provides integration of FlexPLM to one (and only one) system of non-PTC software. No other use of ThingWorx is permitted. To connect to additional non-PTC systems, Customers will need to license the TRC Additional System Connection (SAS-2254-F) for each additional non-PTC system. There is no limit to the number of SAS-2254-F licenses that can be acquired once SAS-2253-F is licensed.

Offering Basis

- TRC SaaS is contracted on a yearly basis unless otherwise noted.

- There are two subscriptions required – a Base and a per-connection fee covering the PTC responsibilities for connections between TRC and third-party solutions or services.

-

Solution Service Model

Customers are required to adhere to PTC SaaS security policies and solution usage guidelines when defining TRC custom Apps.

PTC 3D Optimization SaaS

Introduction

This offering provides customers with a SaaS integration to optimize 3D files of .GLB format and a 3D viewer to view those 3D files. This includes sharing of 3D files (.GLB format) with a 3rd Party Service to review, optimize, generate 2D visuals of the uploaded 3D file. Optimized 3D files (.GLB format) will be retrieved from the 3rd Party Service for storage, review and access in FlexPLM.

Solution Scope

PTC 3D Optimization SaaS is available as an optional service package with required and optional services that can be purchased separately. The solution includes software entitlement choices. It is sold as an expansion to a PTC SaaS FlexPLM service.

PTC 3D Optimization SaaS entitlement includes:

- Entitlement to PTC 3D Optimization SaaS Service

- Integration between PTC SaaS managed FlexPLM instance/s and 3rd Party 3D Optimization Service

- Administrator credentials and access to the 3rd Party 3D Optimization Service Dashboard

Offering Basis
- PTC 3D Optimization SaaS is contracted on a yearly basis unless otherwise noted.

Solution Service Model
- The PTC 3D Optimization SaaS is sold as each and only as an add-on to existing FlexPLM SaaS or Managed environments.

- There is a per user license required for each Windchill FlexPLM User when the PTC 3D Optimization SaaS add-on is enabled

- Content published from Browzwear will be required to use the 3D Plugin to trigger 3D Optimization.

PTC Canvas SaaS

Introduction

The PTC Canvas SaaS offering is available in three different service packages:

- **PTC Canvas – Core Capabilities**: This offering provides access to PTC's Canvas application. Canvas is a concept management and collaboration offering that allows retailers and brand owners to capture ideas, trends, and other product development information and share those ideas with internal and external users.

- **PTC Canvas – Trend Packs**: This offering provides access to trending imagery from social media platforms. The imagery is provided within Canvas and can be tailored to a retailer or brand owner's specific needs.

- **PTC Canvas – Advanced PLM Integration**: This offering provides the ability for Customers using Canvas to retrieve data from a connected FlexPLM environment and create data in FlexPLM using Canvas as the means to capture that data initially.

Offering Basis
- All PTC Canvas service packages specified above are sold on the basis of Monthly Active Users.

- Customers must purchase PTC Canvas Core Capabilities before adding other options

- Included storage for each PTC Canvas Core Capabilities service package is 2 GB of storage per user

- PTC Canvas – Trend Packs are packs of four Trend Streams. Trend Streams are streams that are customized to show imagery based on a category or topic defined by the Customer. For example, a Customer may want to see trending imagery for sports-related performance outerwear.

  - Customer must pay the per Trend Pack fee for each user leveraging any of the tailored Trend Streams within a Trend Pack in the applicable month. A single user accessing all 4 Trend Streams will be counted as 4 Trend Pack users.
  - PTC will work with a Customer to establish a tailored Trend Stream and then refine that Trend Stream over a three-month period. During this period, the Customer can provide feedback to PTC that enables PTC to adjust the image search mechanism so it can provide more relevant images. No adjustments to the tailored Trend Streams will be made after the end of the three-month period.
  - If Customer desires additional or different Trend Streams, additional Trend Packs would need to be purchased.

- PTC Canvas – Advanced PLM Integration users are sold on a per user basis and counted based on Monthly Active Users. Each customer must configure their Canvas settings to specify their FlexPLM environment details. Customers requiring assistance can work with their SaaS service managers for help via a service request.

ThingWorx Navigate SaaS

Introduction

The ThingWorx Navigate SaaS offering includes connectivity to a PTC SaaS Services PLM solution (purchased as SaaS or Managed Services) and, with additional fees, supports integration with external on-premise and cloud systems such as ERP and CRM.

Solution Scope

ThingWorx Navigate SaaS is available as a standard service package with optional services that can be purchased separately. The solution includes software entitlement choices, a bundle of standard cloud service entitlements, and add-on cloud services to meet Customer specific requirements. It is sold as an expansion to the Windchill SaaS offerings. ThingWorx Navigate SaaS standard entitlement includes:

- Navigate Packages: Customers may purchase Users, registered as either View or Contribute, or Active Daily User licenses
- A single production instance and a single non-production instance
- Integration between a single ThingWorx Navigate and a single PTC SaaS managed Windchill instance for each included environment
- Storage allocation of 500 GB shared across all purchased environments
- A total of 6 Named Service Requests per year across all environments (option to purchase additional)
- Service Management engagement as described in the Service and Support terms and offered at the same level as entitled for PLM SaaS

Offering Basis

- Thingworx Navigate SaaS 1.0 is contracted on the basis of Monthly Active Users or Active Daily Users.
- There are four types of Registered User profiles that may be assigned: Contribute, View, Connected PLM View, Connected PLM [Contribute]. Each User type grants the assigned User access only to the functionality entitled by that profile. The Contribute profile includes access to the View capabilities. Customers are required to create Users within the ThingWorx Navigate production environment. Failure to manage the creation and assignment of users may result in unexpected consumption records and associated overage fees. PTC is not responsible for incorrectly managed users in the system.
- ThingWorx Navigate SaaS apps may only connect to other software systems. Apps that connect to physical devices are not allowed as part of this Service.
- ThingWorx Navigate SaaS does not include Microsoft Azure Iot Hub as part of this Service.
- Connections to additional systems beyond those included as standard inclusion (specified above) are not included unless purchased separately and defined in the Quote.
- Active Daily User licenses are not allowed overages. Consumption will be limited to the contracted number of Users only.
- Customers are responsible to configure their identity and access management integration and SSO experience using the provided PingFederate service as the central authentication server.

Data Export

Depending on the offerings purchased, data export will include applicable items from the following: Database schema export, Directory LDIF export or similar user list export, Enterprise LDAP LDIF export, external file vault(s) contents.

Servigistics SaaS Offerings

Introduction

    The SPM SaaS offering applies solely to PTC Servigistics SPM products as specified below and not to any other PTC product or service.

    SPM SaaS is offered as several packages that address different market segments, as specified below. A Customer is required to license only one package as the functionality is cumulative (e.g., Advanced includes all Foundation features plus more).

Solution Scope

    SPM SaaS Standard Services include:

- A single production instance and a single non-production instance
- Storage allocation as specified below
- A total of 12 Named Service Requests per calendar year across all purchased environments.
- Standard Service Management as specified in the Support Terms and Conditions document

Offering Basis

    A brief description of each package/add on is provided below.

- **Servigistics SaaS SPM Commercial Foundation** – Base SPM package for non-Federal, Aerospace and Defense (FA&D) Customers including high tech, medical, auto, heavy equipment, etc.
- **Servigistics SaaS SPM Commercial Foundation+** – Mid-level SPM package for non-Federal, Aerospace and Defense (FA&D) Customers including high tech, medical, auto, heavy equipment, etc.
- **Servigistics SaaS SPM Commercial Advanced** – Advanced package for non-FA&D Customers including high tech, medical, auto, heavy equipment, etc.
- **Servigistics SaaS SPM Commercial Aviation Foundation** – Base SPM package for commercial aviation Customers
- **Servigistics SaaS SPM Defense Foundation** – Base SPM package for defense Customers including government and other PBL based businesses
- **Servigistics SaaS SPM FA&D Advanced** – Advanced package for all FA&D Customers (commercial airlines and defense)
- **Servigistics SaaS SPM Premium** - Premium SPM Package for Customers in all industries.
- **SaaS SPM PAI Advanced** – Add on to Foundation or Foundation+ Packages for FA&D and non-FA&D customers when Advanced PAI functionality is needed but not the entire Advanced Package.

    The SPM Solution is delivered as Software as a Service, each package provides specific product feature sets as specified below.

Commercial Foundation	Commercial Foundation+	Commercial Advanced	Premium
Includes full breadth of the following SPM features: • Forecasting • Optimization (MEO) • Order Planning • Last Time Buy (LTB) • PAI Foundation • Global Part Chains • Enhanced Supply Chain Modeling	Commercial Foundation PLUS: • Advanced Forecasting • Advanced MEO • Advanced Order Planning • History Based Simulation	Commercial Foundation+ PLUS: • Cluster Based LTB • Local Part Chains • Network Optimization • Service Parts Pricing • Connected SPM • PAI Advanced	Commercial Advanced PLUS: • AUO • K-Curve

Commercial Aviation Foundation	Defense Foundation	FA&D Advanced
Includes full breadth of following SPM features: • Forecasting and Advanced Forecasting • Optimization (MEO) • Order Planning • Last Time Buy (LTB) • PAI Foundation • Global Part Chains • Enhanced Supply Chain Modeling • History Based Simulation	Includes full breadth of following SPM features: • Forecasting and Advanced Forecasting • Optimization (MEO and AUO) • Order Planning • PAI Foundation • Global Part Chains • Enhanced Supply Chain Modeling • History Based Simulation	Commercial Aviation Foundation PLUS: • Advanced Forecasting • Advanced Optimization (MEO and AUO) • Advanced Order Planning • Cluster Based LTB • Local Part Chains • Network Optimization • Connected SPM • PAI Advanced

Licensing Profiles and Allowable Configurations

License Profile

SPM SaaS is licensed based on one of two variables, PMI or PXL.

For the PMI-based offering, in such case the license is limited by the value of inventory that is included in the software (using the values assigned by the Customer as specified in the software and consistent with the values of such inventory as stated in the company's audited financial systems) as of the date the software is first implemented for or by Customer (the "Baseline Value"). It is sold in blocks of US$1 million (or such other currency as may be specified in the Quote), with each quantity unit ordered representing US$1 million of Customer inventory. Additional restrictions (e.g., geographic, divisional, etc.) may be specified in the order documents. Customer will be required from time to time upon request to inform PTC of the value of the inventory included in the software. All parts, at all locations (parts times locations) input to the SPM system is considered inventory (e.g., forecasted, optimized, supply/demand planned, repaired, balanced, etc) regardless of the condition of the inventory (e.g., on hand new, on hand fixed, on hand bad, on order, in return, in repair). If the value of the inventory managed in the software drops below the Baseline Value, Customer shall nonetheless be required to license at least the Baseline Value. If the value of the inventory managed increases above the Baseline Value, Customer shall be required to license the excess amount. In the event Customer acquires other businesses and desires to manage the inventory of such other businesses using the software, Customer shall notify PTC of such fact and the parties shall negotiate in good faith an increase to the Baseline Value (and corresponding fees).

For the PXL-based offering, the calculation of the number of PXLs required shall be determined by multiplying the number of part numbers in the software times the number of locations in the software as of the date the software is first implemented for or by Customer (the "Baseline Value"). For example, without limiting the foregoing, if Customer includes in the software 10,000 part numbers and 4 locations, Customer will be managing 40,000 "PXLs" and would need to purchase a quantity of at least 40,000 PXLs. If the number of PXLs in the software drops below the Baseline Value, Customer shall nonetheless be required to license at least the Baseline Value. If the number of PXLs in the software increases above the Baseline Value, Customer shall be required to license the excess amount. In the event Customer acquires other businesses and desires to manage the inventory of such other businesses using the software, Customer shall notify PTC of such fact and the parties shall negotiate in good faith an increase to the Baseline Value (and corresponding fees).

There is a third variable that is not directly used to price the offering but can act as a constraint/limit to the pricing. This variable is Part/Location pairs (PLP).

"PLP" is defined the quantity of Part/Location Pairs (part at a location) planned in the system. Each part has the potential to be planned at one or more locations in the network/hierarchy. In SPM forecasting and planning are done for each part at each location where it has been used in the past (demand) or is anticipated to be used in the future (forecast). The total number of PLPs is a factor in system processing and environment sizing.

Configurations

The SPM SaaS offering supports additional configuration, customization, and integration capabilities. In case of customizations and integrations, the Customer will be required to pay to PTC additional Extended SaaS Service (ESS) fees for run-time support, maintenance and upgrade of such customizations and integrations.

PLP/Data Entitlements

For PMI based pricing, regardless of package purchased, there is a recommended limit to the number of PLPs that can be managed in the system based on the inventory tier. There is also a storage allocation for each of the PMI tiers. Details below:

Storage is defined as the amount of data stored in the database for the SPM solution

	PMI (USD)				
Millions of dollars of inventory under management	$24 - $49	$50 − $99	$100 − $199	$200 - $499	$500+
PLPs	Up to 1,000,000	1,000,001 – 3,000,000	3,000,001 – 9,000,000	9,000,001 – 16,000,000	16,000,000+
Storage	350GB	700GB	1,000GB	1,750GB	3,000GB

Data Export

Data Export: The data export for this offering includes the information required to redeploy the software in another environment. Depending on the solution purchased, this may include: Database schema export, Directory LDIF export or similar user list export, Enterprise LDAP LDIF export contents.

ThingWorx SaaS Offerings

ThingWorx SCP SaaS Platform Service

Introduction

This offering grants to Customer for the Term of Customer's subscription to the ThingWorx SCP SaaS Platform Service, a non-exclusive, nontransferable limited right and license to access and use ThingWorx SCP SaaS Platform Service for connecting Customer's products and for building and running IoT applications. The ThingWorx SCP SaaS Platform Service may not be used for remote management of Customer's operations.

Solution Scope

ThingWorx SCP SaaS Platform is available as a standard service package with optional services that can be purchased separately.

All ThingWorx SCP SaaS Services include:

- ThingWorx SCP SaaS Editions (Premium, Professional, Enterprise) or Machine Builder Bundle
- Registered Users and Assets as specified in each edition
- Connectivity to Kepware or any other supported Edge Agent technology
- Use of the PTC Hosted Global Access Server (GAS) network for remote diagnostic sessions with compatible devices
- A single dedicated production instance
- Storage allocation as specified per environment
- Connectivity to Microsoft Azure IoTHub
- A total of 12 Named Service Requests per calendar year across all purchased environments
- Service Management engagement as described in the Service and Support Terms and Conditions

Offering Basis

There are different ThingWorx SCP SaaS Platform "Editions": Premium Edition, Professional Edition, and Enterprise Edition and ThingWorx Machine Builder Bundles Each ThingWorx SCP SaaS Platform Edition includes a designated number of SCP Registered Users, Assets, and ThingWorx SCP SaaS Platform Edition-specific features as set forth in the license profile. The ThingWorx SCP SaaS Platform cannot be installed on the Customer's physical premises or at the Customer's designated hosting provider. An "Instance" means a deployment of application servers. Each ThingWorx SCP SaaS Platform Edition includes the "ThingWorx agents" or "Edge Microservers"

and a ThingWorx SDK used by the Customer to add connectivity into the Customer's run-time applications. The "ThingWorx agents," "Edge Microservers," and Customer's applications created with a ThingWorx SDK are unlimited and distributable with connected products, but only for use with ThingWorx products. ThingWorx agents, and Edge Microservers are non-hosted components of the service and are directly maintained by the Customer.

- ThingWorx SCP SaaS Platform production instance is sized based on the Customer's unique entitlements such as Assets and Registered Users. The system is designed to support a highly secure operational mode and accommodate backup and restore options that support PTC SLA commitments. PTC reserves the right to review Customer implementation for performance, security and scalability concerns to ensure proper performance of the production instance. Customer implementations that create extraordinary usage that negatively impacts performance of Customer system may be subject to additional fees.
- The ThingWorx GAS Network is a collection of Nodes (Servers), that function as rendezvous points for remote diagnostic sessions being performed by service technicians. Remote sessions are routed from a remotely located asset, through the GAS node, to the technician's PC. These servers and routings off load traffic from the main IoT server, assist in reducing session latencies, and aid in complying with data sovereignty requirements.
- Customers are responsible for all configuration and maintenance of remote Assets. PTC does not provide support for any devices at the edge.
- Customer must maintain that all connected Assets communicate at a minimum-security SSL level of TLS 1.2
    - If Assets are not at specified level, Customer must gain approval from PTC in writing to connect assets to the service
    - PTC reserves the right to disconnect or block communication that does not meet the minimum-security level
    - PTC reserves the right to increase the minimum-security SSL TLS level that assets may connect at
- The following Service inclusions are subject to overage fees as defined in the Quote if Customers exceed their allowances:
    - Assets
    - Registered Users
    - Data/Storage

ThingWorx SCP SaaS Platform standard entitlement includes:

	Premium	Professional	Enterprise
Assets (included)	50	75	100
SCP Registered Users (included)	5	5	5
SCP View Only Users (included)	Included	Included	Included
ThingWorx Foundation	Included	Included	Included
ThingWorx Analytics (1)	Not Available	8 cores included	16 cores included
ThingWorx Flow	Not Available	Not Available	Included
Software Content Management	Not Available	Not Included	Included
IoT Hub	1 IoT Hub Unit S1		
Technical Support	Gold+		
eLearning (Registered Users)	1 license per Registered User		

1. If the Customer exceeds the compute capacity of the included ThingWorx Analytics cores, the Customer can purchase additional core entitlement for additional compute capacity on any of instance running components that deliver computational functionality.

ThingWorx Machine Builder:

The ThingWorx Machine Builder Service Bundle entitles Customers to use the ThingWorx SCP SaaS Service, Vuforia Chalk SaaS, ThingWorx Kepware Edge for SaaS, and other bundled functionality for connecting Customer's products and for creating and running IoT applications.

See, the "Vuforia Chalk SaaS Offering" Section of this document, which is incorporated herein subject to the additional/different terms and entitlements set forth below.

ThingWorx Machine Builder Bundle standard entitlements:

	MBB Tier 1	MBB Tier 2	MBB Tier 3	MBB Tier 4
Assets (included)	25	250	1000	2000
SCP Registered Users (included)	5	5	5	5
SCP View Only Users (included)	Included	Included	Included	Included
ThingWorx Foundation	Included	Included	Included	Included
ThingWorx Analytics (1)	Not Included	Not Included	Not Included	Not Included
ThingWorx Flow	Included	Included	Included	Included
Software Content Management	Not Included	Not Included	Not Included	Not Included

ThingWorx Kepware Edge For SaaS (up to 1500 Tags Per Designated Computer)	25	250	1000	2000
Vuforia Chalk Users (2)	5	5	5	5
IoT Hub	1 IoT Hub Unit S1			
Technical Support	Gold+			
eLearning (Registered Users)	5 Registered Users			

1. If the Customer exceeds the compute capacity of the included ThingWorx Analytics cores, the Customer can purchase additional core entitlement for additional compute capacity on any of instance running components that deliver computational functionality

2. The Vuforia Chalk SaaS offerings are entitled by Registered Users. "Registered User" means Users who have a log-in and password and are authorized by the Customer Chalk administrator to use the Chalk application. The Customer Chalk administrator 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 subscriptions in effect at such time.

Additional Instances – Production

Additional production instances may be purchased separately. These instances do not include additional Assets or Registered Users but are entitled to reflect the standard production entitlement as quoted. Customer may allocate Assets or Registered Users to a single production or additional production instance. Additional production instances are sized based on the number of devices and users allocated to that particular instance.

Additional Instances – Non-Production

Additional non-production (Development, QA and Integration) instances may be purchased separately. These instances do not have limitations on number of Assets or Registered Users, however, are designed to support functional development and testing. Load and performance testing is not covered. If additional performance is required, please contact your PTC Representative.

Additional Databases

This entitles the Customer to Production and non-production databases, purchased separately. Customers must purchase at a minimum 1 database of each (Production and Non-Production) to ensure there is a non-production for testing and validation. Sizing (as defined by CPU Cores) and storage will be specified in the Quote. The databases configured are pursuant to the conditions specified in the General Terms and Conditions and will not have an individual SLA for production. Customer implementations that create extraordinary usage that negatively impacts performance of Customer system may be subject to additional fees.

ThingWorx High Availability

ThingWorx High Availability is an add on to any compatible ThingWorx SCP SaaS entitlement. This entitles the Customer's production system to be configured with active-active clustering that is included in ThingWorx 9.0 and higher versions. This entitlement does not change any SLA unless otherwise specified in the Quote.

ThingWorx Kepware Edge for SaaS

The ThingWorx Kepware Edge for SaaS offering is sold on the basis that a license is needed for each Designated Computer and is limited to the specified number of tags in the product description (generally, one Tag equates to one data item). Designated Computer products are licensed to operate solely on the designated computer on which they are installed. ThingWorx Kepware Edge for SaaS components and functionality may only be used to connect to the ThingWorx SCP SaaS Platform Service that is included with the ThingWorx Machine Builder Service Bundle.

License Profiles and Allowable Configurations

License Profiles

The ThingWorx SCP SaaS offerings are entitled by Assets. There are 2 types of Assets that may be entitled.

Normal Asset (IoT) (also sometimes referred to in the product itself or elsewhere as a "Device" or a "Thing" or a "Remote Thing") means a sensor, device, machine, system, web service, etc. that is modeled (represented) and/or registered as an asset (or "device" or "thing" within the Licensed Product) or any separately defined part of the foregoing if it is being treated as a separate asset within the software. For example, without limitation, an Asset could be a brake press, industrial dryer, another computer system, or a set of individual components within those machines if modeled or registered as a separate asset in the software), etc.

Simple Narrow Band IoT (NB-IoT) or Unconnected Asset means a device that runs on an industry standard Low Power Wide Area Network (LPWAN). These devices are considered remote things on the ThingWorx platform. These assets are differentiated from the Normal Asset due to their connection via LPWAN networks. Additionally, this class of assets includes unconnected assets. Assets of

this class include any asset that is created in the offering and represents a physical or virtual asset but is in no way connected to the asset. It is only represented virtually in the offering.

Configurations

Customers will not have access to the OS or Server level of the offering. All configurations and customizations have to be realized through ThingWorx official configuration and customization options (Composer, loading extensions, Solution Central).

Data & Devices
Data Storage Entitlements

Customers are entitled to different levels of storage based on the edition of ThingWorx that they have subscribed to as detailed in this section. In addition, they can purchase additional storage in blocks of 1GB. The total amount of storage a Customer is entitled to is for the ThingWorx production environment and is determined by the total storage of all Customer data in both the ThingWorx file system and the ThingWorx database(s), this is inclusive of all ThingWorx components unless otherwise specified. For the included ThingWorx Integration Environment, 100GB of base storage is included.

All storage entitlements are detailed in the table below:

ThingWorx Edition	Base Storage	Additional Storage Entitlements
ThingWorx SCP Premium SaaS	100GB	0.1GB per additional purchased IoT Asset entitled 0.0045GB per additional purchased NB-IoT Asset
ThingWorx SCP Professional SaaS	100GB	0.1GB per additional purchased IoT Asset entitled 0.0045GB per additional purchased NB-IoT Asset
ThingWorx SCP Enterprise SaaS	100GB	0.1GB per additional purchased IoT Asset entitled 0.0045GB per additional purchased NB-IoT Asset
ThingWorx Machine Builder Bundles (all)	100GB	0.1GB per additional purchased IoT Asset entitled 0.0045GB per additional purchased NB-IoT Asset
ThingWorx Non-Production Environment	100GB	None

Example:
Customer purchases ThingWorx SCP Enterprise SaaS with 100 additional normal assets:
Customer Production environment entitled to: 100GB + (100 * .1) = 110GB total storage

Data Export Formats

Depending on the solution(s) purchased, data export will include applicable items such as service configuration and data. This data can be exported in 2 formats
- Export of all entities via ThingWorx Export functionality, delivered as XML and JSON files
- Export of the database(s) according to each database standard export format

Additionally, any files in the ThingWorx Storage repositories will be provided in a ZIP format.

ThingWorx SCO Solutions SaaS Platform Service

Introduction
The ThingWorx SCO models allow Customers to license the IoT Platform for connecting and monitoring Customer's internal manufacturing systems, processes, and/or operations related to the production of Customer products. There are several SCO Solutions models, which are based primarily on solutions/use cases sold per Site, plus SCO Named Users and in some cases assets. Each model includes the "ThingWorx agents" or "Edge Microservers" and a ThingWorx SDK used by the Customer to add connectivity into the applications. The "ThingWorx agents," "Edge Microservers," and Customer Applications created with a ThingWorx SDK may be used only with ThingWorx Assets.

SCO Solutions Models

Definitions Applicable to SCO Solutions Models

- An "Application Production User Interface" is the point at which the human end-user interacts with a computer, website, or application, in a single unified screen. Every unique combination of user interface elements, components, mashups etc., is considered its own single Application Production User Interface. The application may be made up of several Application Production User Interfaces, linked together to solve a business problem.
- "Connected Asset" is production equipment (assets) used by Customer to produce and deliver materials during the manufacturing process. The asset may include one or multiple sensors, devices, machines, system, web service, etc. that are represented (modeled or configured) as an asset (or "device" or "thing"). For example, without limitation, a Connected Asset could be a brake press, industrial dryer, another computer system, or a set of individual components within those machines if represented (modeled or configured) as a separate asset in the software. Connected Asset licenses are required in Process Manufacturing for any Connected Assets that are represented or visualized in the Offering.
- A "Custom Application" is a software application not created by PTC that has been built for a single business use case for end users, addressing the Customer's needs and requirements. A Custom Application is developed using the ThingWorx platform technology and made up of a combination of backend components, services, mashups, and up to 10 Application Production User Interfaces per Custom Application. Any Custom Applications requiring more than 10 Application Production User Interfaces will require the purchase of a second Custom Application license.
- "Process Manufacturing" is manufacturing that mixes or combines ingredients utilizing a recipe, blend, or formula to create a chemical, physical or compositional change resulting in finished goods (indistinct units). The materials that make the finished product are typically in varying units of measurement, and can be transformed (e.g., gas, liquid, oil, powder) into a final product which cannot be taken apart into its original forms. Process manufacturing relies on the flow of sequential steps, with the completion of one step leading to the start of the next step. Examples include, without limitation, the manufacturing of food items, beverages, chemicals, pharmaceuticals, plastics, and oil & gas. Examples of manufacturing that is not process manufacturing include, without limitation, the manufacturing of things such as turbines, furniture, appliances, cars, nuts, bolts, smart phones, and generators.
- "SCO Named User" means a person who accesses the ThingWorx Platform directly (when sold with SCO Solutions Premium or SCO Solutions Enterprise) or via an intermediate application (when sold with Digital Performance Management or SCO Use Case).
- A "Site" means a customer building or set of connected buildings where the software is being used.

SaaS SCO Solutions Enterprise Model - PTC's SCO Solutions Enterprise model permits Customer to use ThingWorx to develop Custom Applications for SCO purposes. The licensing basis for PTC's SCO Solutions Enterprise model entails a fee for use of the ThingWorx Platform, and this fee will allow the Customer to deploy an unlimited number of applications at one site. An additional fee will be required for each additional Site where such application(s) are deployed. So, for example, without limitation, if Customer deploys five applications at three Sites, three Site licenses will be required. Furthermore, fees are required for each SCO Named User over 100 users per Site, and for Process Manufacturing, a fee is also required per Connected Asset. The SCO Solutions Enterprise model comes with the entitlements specified in the table below.

SaaS SCO Solutions Standard – PTC's SCO Solutions Standard model permits a customer to use ThingWorx for PTC developed Solutions. These solutions such as Digital Performance Management (DPM) and others listed in the table below are PTC-provided applications that can be purchased by Customer in connection with any of the SCO Solutions models specified above. Each solution is licensed and purchased individually per customer manufacturing site. Customer may edit the mashups provided with the out-of-the-box DPM solution but is prohibited from creating new mashups (either directly or by excessively editing the existing mashups). Customer may integrate DPM with other systems but only for read-only purposes. Customer may access ThingWorx only to configure Kepware tags for connectivity, and for no other purposes. The Solutions Standard model comes with the entitlements specified in the table below.

SaaS SCO Solutions Premium Model - PTC's SCO Solutions Premium model permits Customer to use ThingWorx to develop Custom Applications for SCO purposes. The licensing basis for PTC's SCO Solutions Premium model entails a fee for use of the ThingWorx Platform, and this fee will allow the Customer to deploy one application at one Site. An additional fee will be required for each additional application and each additional Site where such application(s) are deployed. So, for example, without limitation, if Customer deploys two applications at two Sites, four licenses will be required. Furthermore, fees are required for each SCO Named User over 25 users, and for Process Manufacturing, a fee is also required per Connected Asset. The SCO Solutions Premium model comes with the entitlements specified in the table below. SCO Solutions Premium may only be purchased in addition to a site that has purchased DPM

Solution Scope

ThingWorx SCO Solutions SaaS Platform Standard Services include:

- Users in the quantity specified below for each configuration purchased by Customer
- Connectivity to Assets via Kepware or any other supported edge agent technology, within the defined use cases for SCO
- Connectivity to Microsoft Azure IoTHub
- A single dedicated production instance
- Storage allocation as specified in the table below
- A total of 12 Named Service Requests per calendar year across all purchased environments.
- Standard Service Management as specified in the Support Terms and Conditions document

Offering Basis
- The ThingWorx SCO Solutions model allows Customers to license the IoT Platform and Solutions for connecting and monitoring Customer's internal manufacturing systems, processes, and/or operations related to the production of Customer products, using a Registered User-based model.
- Customers are responsible for all configuration and maintenance of remote Assets. PTC does not provide support for any devices at the edge.
- Customer must maintain that all connected Assets communicate at a minimum-security SSL level of TLS 1.2
  - If Assets are not at specified level, Customer must gain approval from PTC in writing to connect assets to the service
  - PTC reserves the right to disconnect or block communication that does not meet the minimum-security level
  - PTC reserves the right to increase the minimum-security SSL TLS level that assets may connect at
- The following Service inclusions are subject to overage fees as specified in the Quote if Customers exceed their allowances:
  - Registered Users
  - Data/Storage
  - Microsoft Azure IoTHub Usage

SCO Solutions License Profiles and Allowable Configurations

License Profiles
The ThingWorx SCO Solutions SaaS offerings are entitled by any of the following Solutions, Registered Users and/or Use Case access as specified in the configurations below.

Configurations
There are several configurations that Customer may purchase: the ThingWorx SCO Solutions Standard, the SCO Solutions Premium with SCO Use Case Applications, the SCO Solutions Enterprise and SCO Custom Enterprise- each with the entitlements specified below. Any customizations or configurations outside of the ThingWorx interface are not allowed. Customers will not have access to the OS or Server level of the offering.

	SCO Solutions Standard	SCO Solutions Premium (2)	SCO Solutions Premium - Use Case Application	SCO Solutions Enterprise	SCO Solutions Custom Enterprise
SCO Solutions Named Users (Included, more may be purchased separately)	25 per offering	0	25 per use case	100 enterprise users	
Connected Assets	Purchased separately. Only required if license is for use in Process Manufacturing.				
Custom Applications	0	0	1 per offering	Unlimited	Unlimited
ThingWorx Environments	1 production instance included per contract				
Digital Performance Management	Separately Purchased as Part of Offering	Separately Purchased as Part of Offering	Not Included	Included	Not Included
Asset Monitoring and Utilization	Separately Purchased as Part of Offering	Separately Purchased as Part of Offering	Not Included	Included	Not Included

Connected Work Cell	Separately Purchased as Part of Offering	Separately Purchased as Part of Offering	Not Included	Included	Not Included
Real Time Production and Performance Monitoring	Separately Purchased as Part of Offering	Separately Purchased as Part of Offering	Not Included	Included	Not Included
Foundation	Included with limited Composer Access (1)	Included	Included	Included	Included
Analytics	Included	Included	Not Included	Included	Included
Flow	Not Included	Included	Not Included	Included	Included
Kepware	5	0	5	Enterprise Kepware	Enterprise Kepware
IoT Hub	1 IoT Hub Unit S1			1 IoT Hub Unit S2	
eLearning	1 License per Registered User				
Technical Support	Gold+				
Software Content Management	Purchased Separately				

1. ThingWorx Foundation is deployed for SCO Solutions Standard; however, the Customer under this offering will only have access to ThingWorx Composer to customize and configure ThingWorx applications, not to create new "Custom Use Case Applications".
2. SCO Solutions Premium must be purchased for every manufacturing site the solution or applications will be deployed to.
3. Only one production environment will be included in the SCO Solutions offerings.

Additional Users – SCO Solutions Standard and Premium
Additional users for SCO Solutions Standard and Premium are purchased on a per site and per use case basis. A use case includes custom application use cases, or the Out of the Box Thingworx solutions to presently include DPM, CWC, AMU, and RTPPM.

> Example:
> Site "A" has one DPM and one CWC application deployed, each app with 25 entitled users. The site has 30 workers with access needed to both solutions. The customer should purchase 10 additional users, 5 for each use case, for this site.

Additional Users – SCO Solutions Enterprise and Custom Enterprise
Additional users for SCO Solutions Enterprise and Custom Enterprise are purchased on a per site basis. Enterprise users are entitled with access to all custom use cases and solutions on that specific site.

> Example:
> Site "B" has an enterprise offering deployed consisting of multiple custom use cases. The offering was entitled with 100 enterprise users at that site. The customer purchases 10 more enterprise users, to total 110 users with access to all use cases deployed for Site "B".

Additional Instances – Production
Additional production instances may be purchased separately and can be used to support multiple manufacturing sites or regions. These instances do not include additional Registered Users and are entitled to reflect the standard production entitlements as quoted. This will entitle the Customer to a production instance that is subject to PTC Service Level Agreement (SLA), Service Level Targets (SLT) and other terms as described in the General Terms and Conditions. Customer may allocate Registered Users to a single production instance. Additional production instances are sized based on the number of users allocated to that instance.

Additional Instances – Non-Production
Additional non-production (Development, QA and Integration) instances may be purchased separately. These instances do not have limitations on number of Assets or Registered Users, however, are designed to support functional development and testing of no more than 5 assets. If additional performance is required, please contact your PTC Representative.

Additional Databases

This entitles the Customer to Production and non-production databases, purchased separately. Customers must purchase at a minimum 1 database of each to ensure there is a non-production for testing and validation, and a production instance. Sizing (as defined by CPU Cores) and storage will be specified in the Quote. The databases configured are pursuant to the conditions specified in the Terms and Conditions and will not have an individual SLA for production. Customer implementations that create extraordinary usage that negatively impacts performance of Customer system may be subject to additional fees.

ThingWorx High Availability

ThingWorx High Availability is an add on to any compatible SCO Solutions environment. This entitles the Customer's production system to be configured with active-active clustering that is included in ThingWorx 9.0 and higher versions. This entitlement does not change any SLA unless otherwise specified in the Quote.

Configurations

Customers will not have access to the OS or Server level of the offering. All configurations and customizations have to be realized through ThingWorx official configuration and customization options (Composer, loading extensions, ThingWorx Solution Central).

Data & Devices

Data Storage Entitlements

Customers are entitled to different levels of storage based on the edition of ThingWorx that they have subscribed to as detailed in this section. In addition, they can purchase additional storage in blocks of 1GB. The total amount of storage a Customer is entitled to is for the ThingWorx production environment and is determined by the total storage of all Customer data in both the ThingWorx file system and the ThingWorx database(s), this is inclusive of all ThingWorx components unless otherwise specified. For the included ThingWorx Integration Environment, 100GB of base storage is included.

All storage entitlements are detailed in the table below:

ThingWorx Edition	Base Storage	Additional Storage Entitlements
ThingWorx SCO Solutions Standard	325GB	100GB Per App
ThingWorx SCO Solutions Premium	325GB	None
ThingWorx SCO Solutions Use Case Application	Not Applicable	100GB Per App
ThingWorx SCO Solutions Enterprise	1325GB	100GB Per Site
ThingWorx SCO Solutions Custom Enterprise	1325GB	100GB Per Site
ThingWorx Non-Production Environment	100GB	None

Example:
Customer purchases ThingWorx SCO Solutions Premium with two Use Case Applications:
Customer production environment entitled to: 325GB + (2 * 100GB) = 525GB total storage

Data Export Formats

Depending on the solution(s) purchased, data export will include applicable items such as service configuration and data. This data can be exported in 2 formats
- Export of all entities via ThingWorx Export functionality, delivered as XML and JSON files
- Export of the database(s) according to each database standard export format

Additionally, any files in the ThingWorx Storage repositories will be provided in a ZIP format.

ThingWorx Legacy SCO SaaS Platform Service

Introduction

This offering provides Customer access to the ThingWorx SCO SaaS Platform Service for connecting Customer's factories and for building and running IoT applications. The ThingWorx SCO SaaS Platform Service may not be used for smart connected product purposes (i.e., developing applications to enable internet-connectivity for and/or remote management of products made and/or sold by Customer).

Solution Scope

The Legacy SCO SaaS Platform Service is available in Premium and Enterprise models with optional services that can be purchased separately. The Legacy SCO SaaS Platform Service models include:

- Users in the quantity specified below for each configuration purchased by Customer
- Connectivity to Assets via Kepware or any other supported edge agent technology, within the defined use cases for SCO
- A single dedicated production instance
- Storage allocation as specified below
- Connectivity to Microsoft Azure IoTHub
- A total of 12 Named Service Requests per calendar year across all purchased environments.
- Standard Service Management as specified in the Support Terms and Conditions document

Offering Basis

- Customers are responsible for all configuration and maintenance of remote Assets. PTC does not provide support for any devices at the edge.
- Customer must maintain that all connected Assets communicate at a minimum-security SSL level of TLS 1.2
  - If Assets are not at specified level, Customer must gain approval from PTC in writing to connect assets to the service
  - PTC reserves the right to disconnect or block communication that does not meet the minimum-security level
  - PTC reserves the right to increase the minimum-security SSL TLS level that assets may connect at
- The following Service inclusions are subject to overage fees as specified in the Quote if Customers exceed their allowances:
  - Registered Users
  - Assets
  - Data/Storage

Legacy SCO SaaS License Profiles and Allowable Configurations
License Profiles

The Legacy ThingWorx SCO SaaS offerings are entitled by any of the following Manufacturing Sites, Registered Users and/or Use Cases as specified in the configurations below.

Configurations

There are several configurations that Customer may purchase: the ThingWorx SCO SaaS Platform, the ThingWorx SCO SaaS Multi-Site Platform with the entitlements specified below.

Legacy SCO SaaS Platform (Professional, Enterprise) entitlements includes:

	Professional	Enterprise
SCO Registered Users (included)	10	15
Manufacturing Sites	1	1
ThingWorx Foundation	Included	Included
ThingWorx Analytics (1)	Not Available	16 cores included
ThingWorx Flow	Not Available	Included
Manufacturing Apps (2)	Included	Included
Software Content Management	Not Available	Not Included
IoT Hub	1 Unit IoT Hub S1	
Technical Support	Gold+	
eLearning (Registered Users)	1 license per Registered User	

Additional Manufacturing Sites may be purchased to add on to these offerings.

Legacy SCO SaaS Multi-Site Platform
ThingWorx Multi-Site model has the following standard entitlements:

SCO Registered Users (included)	100 per site
ThingWorx Foundation	Included
ThingWorx Analytics (1)	16 cores included
ThingWorx Flow	Included
Manufacturing Apps (2)	Included
Software Content Management	Not Included

Kepware Servers	Unlimited
Technical Support	Gold+
IoT Hub	1 Unit IoT Hub S1
eLearning (Registered Users)	1 license per Registered User

The offering includes a dedicated production ThingWorx SCO SaaS Environment. Additional environments for manufacturing sites or regions may be purchased.

1. If the Customer exceeds the compute capacity of the included ThingWorx Analytics cores, the Customer can purchase additional core entitlement for additional compute capacity on any of instance running components that deliver computational functionality
2. Some Manufacturing Apps require an additional relational database. Customers must purchase an Additional Database to support this functionality

Legacy SCO SaaS Additional Licensing and Entitlements

Additional Manufacturing Sites

Additional Manufacturing Sites may be purchased to add on to the Legacy ThingWorx SCO SaaS Premium and Enterprise Editions. The additional sites do not include any additional Registered Users or any other entitlements. The Additional Site entitles the Customer to use the Legacy SCO SaaS Offering environment that is included at as many sites as specified in the Quote.
Example:
Purchase ThingWorx SaaS SCO Enterprise + 2 Additional Sites
Customer will be entitled to:
    1 production environment
    1 non-production environment
    Entitlement to connect up to 3 Manufacturing Sites to the above production environment

Additional Instances – Production

Additional production instances may be purchased separately and can be used to support multiple manufacturing sites or regions. These instances do not include additional Registered Users and are entitled to reflect the standard production entitlement as quoted. This will entitle the Customer to connect a separately purchased, additional manufacturing site to a separate ThingWorx production instance that is subject to PTC Service Level Agreement (SLA), Service Level Targets (SLT) and other terms as described in the General Terms and Conditions. Customer may allocate Registered Users to a single production instance. Additional production instances are sized based on the number of users allocated to that instance.

Additional Instances – Non-Production

Additional non-production (QA and Integration) instances may be purchased separately. These instances do not have limitations on the number of Registered Users but are bound by system sizing as specified in the Quote. Additional storage may be purchased.

Additional Databases

This entitles the Customer to Production and non-production databases, purchased separately. Customers must purchase at a minimum 1 database of each to ensure there is a non-production for testing and validation, and a production instance. Sizing (as defined by CPU Cores) and storage will be specified in the Quote. The databases configured are pursuant to the conditions specified in the Terms and Conditions and will not have an individual SLA for production. Customer implementations that create extraordinary usage that negatively impacts performance of Customer system may be subject to additional fees.

ThingWorx High Availability

ThingWorx High Availability is an add on to any compatible Legacy SCO SaaS entitlement. This entitles the Customer's production system to be configured with active-active clustering that is included in ThingWorx 9.0 and higher versions. This entitlement does not change any SLA unless otherwise specified in the Quote.

Data & Devices
Data Storage Entitlements

Customers are entitled to different levels of storage based on the edition of ThingWorx that they have subscribed to as detailed in this section. In addition, they can purchase additional storage in blocks of 1GB. The total amount of storage a Customer is entitled to is for the ThingWorx production environment and is determined by the total storage of all Customer data in both the ThingWorx file system

and the ThingWorx database(s), this is inclusive of all ThingWorx components unless otherwise specified. For the included ThingWorx Integration Environment, 100GB of base storage is included.

All storage entitlements are detailed in the table below:

ThingWorx Edition	Base Storage	Additional Storage Entitlements
Legacy **ThingWorx SCO Premium SaaS**	325GB	None
Legacy **ThingWorx SCO Enterprise SaaS**	1325GB	None
Legacy **ThingWorx SCO Multi-Site SaaS**	1325GB	100GB Per Site
Legacy **ThingWorx SCO Use Case SaaS**	1325GB	50GB Per Use Case
ThingWorx Non-Production Environment	100GB	None

Example:
Customer purchases ThingWorx SCO Multi-Site SaaS with 5 sites:
Customer production environment entitled to: 1325GB + (5 * 100GB) = 1825GB total storage

Data Export Formats
Depending on the solution(s) purchased, data export will include applicable items such as service configuration and data. This data can be exported in 2 formats
- Export of all entities via ThingWorx Export functionality, delivered as XML and JSON files
- Export of the database(s) according to each database standard export format

Additionally, any files in the ThingWorx Storage repositories will be provided in a ZIP format.

Creo AR Design Share

Creo AR Design Share is a product that enables Creo users to publish models directly from Creo, Creo View, Windchill, or Creo Elements/Direct to a PTC-hosted server to be consumed as an Augmented Reality experience through the use of Vuforia View.

Product	Availability	Publishing Admins	Publishers	Published models allowed	Control
Creo AR Design Share – Personal	Free to every seat of Creo 4.0 M040+	1	1	10	• Only 10 models can be hosted on free experience server at one time • Once customer has published 10 models, models must be deleted in order to publish additional models.
Creo AR Design Share – Enterprise	For purchase with Creo 4.0 M040+	1	Unlimited	50	• Admin has full control over all account models, and can delete any models at any time • Publishers have full control over models they have published, and can delete any models they published at any time • Admin can add/delete any Publisher at any time • Access to published models can be restricted by the Admin/Publisher

Vuforia SaaS Offerings

Vuforia Chalk SaaS Offering

Introduction
Vuforia Chalk SaaS is a cloud-based service that enables users to mark-up live views to highlight details or multi-step instructions through the Vuforia Chalk application on mobile computing devices. The Vuforia Chalk SaaS Offering is available in three packages.

Vuforia Chalk Standard
A Registered User is an individual user who has been assigned a log-in by the Customer administrator ("Customer Chalk Admin") to initiate Vuforia Chalk sessions ("Sessions"). Each Vuforia Chalk Standard package includes a number of Registered Users as specified on the Quote. Additional Registered User licenses can be purchased separately.

Vuforia Chalk Premium

Each Vuforia Chalk Premium package includes Standard Registered Users and Host Users as specified on the Quote. This package entitles the Customer to designate Standard Registered Users as Host Users. A "Host User" is a Registered User who has been designated by the Customer Chalk Admin with the ability to start Sessions with end-users of the Vuforia Chalk application ("Guests"). The Customer Chalk Admin may add and/or substitute from time to time new Host Users as long as the aggregate number of Host Users does not exceed at any point in time the number of subscriptions in effect at such time. Host User privileges may not be shared or used by anyone other than the Registered User assigned to be a Host User.

Vuforia Chalk Platinum

Each Vuforia Chalk Platinum Package includes the number of Host Users specified on the Quote. As part of this package, Customer is entitled to a onetime set-up, configuration, and publication of one (1) branded app (per license) of PTC's Vuforia mobile Chalk app ("Branded App"). Subject to completion of Customer's responsibilities set forth below, PTC will manage the setup, build, and publication of the Branded App to the Android and Apple app stores. The Branded App must contain an attribution that the Branded App is "Powered by Vuforia" which is visible to the end-user. PTC does not guarantee if or when the Branded App will be accepted by the app stores. If the Branded App is rejected, PTC will work with the Customer to rectify any issue within PTC's control and resubmit the Branded App for review by the app stores. Upon expiration or termination of the Services Term, PTC will remove the Branded App from the applicable app stores.

- Allowable Configurations & Customer Responsibilities
  The Branded App can be configured to include Customer's color scheme, logo, and company name. Customer will be required to (i) complete any intake forms required by PTC in order to setup and build the Branded App, and (ii) provide all required graphical and marketing assets. Customer shall not remove any proprietary notices included in the Vuforia Chalk mobile application

Each of the above packages provides access to the Vuforia Chalk Admin Center web application (defined below) and the Vuforia Chalk mobile application (which is required to be download from a mobile app store). Any additional terms required to be agreed to by users at the time the Chalk application is downloaded shall not apply and instead will be governed by the General Terms and Conditions and these Offering Specific Provisions.

Administration of Vuforia Chalk SaaS Offering
Customer Admin(s) may add, deactivate or delete a Registered User's account via the Vuforia Chalk Admin Center (the "Admin Center"). Customer is responsible for maintaining the confidentiality of passwords and admin accounts, and managing access to and use of Admin accounts. PTC's responsibilities do not extend to the internal management or administration of the Services for Customer. A Registered User account may be managed only by the Customer Admin and used by a single Registered User. The Customer shall be responsible for the acts and omissions of its Registered Users and Guests in connection with their use of the Services.

Security of User Accounts
Customer is responsible for any activity that occurs under Customer admin accounts and Registered User accounts. It is important that Customer and Registered Users keep accounts secure.
By using the Services, Customer shall not, and shall not permit Registered Users to:

- buy, sell, rent, or lease access to Registered User accounts;
- share passwords;

- log in or attempt to access the Services through third-party applications or clients.

Customer agrees to notify PTC immediately of any breach of security with respect to a Registered User account including passwords. PTC will not be liable for any loss that Customer may incur as a result of a third party using a Registered User account, either with or without Customer's knowledge, or for any data or content viewed while using the Services. In addition, Customer may be held liable for any losses incurred by PTC or another party due to an unauthorized third party using a Registered User account.

Security Measures

PTC follows the below standard security practices:

- Data in transit across open networks is encrypted
- Network and web application firewalls
- Configuration monitoring, network traffic logging and monitoring
- Authentication controls, authorization rules and auditing of administration actions

Data Export

Upon approaching the end of the applicable Service Period, Customer may or request that PTC extract Data available for export. Otherwise, Data will be deleted from the Service after expiration or termination of the applicable Services Term.

Vuforia Expert Capture & Instruct SaaS Offering

Introduction

The Vuforia Expert Capture & Instruct SaaS Offerings are multi-tenant offerings contracted on a Registered User basis. These offerings are used to capture or create procedures, that may include photos, audio, video, 3-D CAD, and on certain devices, spatial data for location awareness. There are defined types of user profiles that may be purchased for each offering: Standard Registered User or Premium Registered User. Each of the packages provides access to the Vuforia Vantage mobile application (which is required to be download from an app store).

Offering Basis

Customers are required to assign Registered Users to license roles based on the type of user profile Customer has purchased. Each role grants the assigned Registered User access only to the capabilities entitled by that role as specified below. If a Customer exceeds the number of applicable Registered Users in effect at any point in time, Customer shall be required to purchase additional Registered Users license. Standard Registered Users may not use or access Premium Registered User capabilities. If such access or use occurs, Customer will be required to separately purchase Premium Registered User licenses. Any additional terms required to be agreed to by users at the time the Vantage application is downloaded shall not apply and instead will be governed by the General Terms and Conditions and these Offering Specific Provisions.

Vuforia Expert Capture

Role Type	Capabilities	Standard Registered User	Premium Registered User
Viewer	**Viewers can view procedures created by others but are unable to create or edit any procedures.**		
	Access to Vuforia Vantage App & Desktop	✔	✔
	Access to Capture App* and Spatial Anchors	✔	✔
	Procedure Execution	✔	✔
Author	**Authors have all Viewer Capabilities plus the following:**		
	Upload Assets		✔
	Ability to add/edit Captures		✔
	Create and edit procedures		✔
	Managers have all Author Capabilities plus the following:		
	Distribution and content management		✔
	Operations analytics dashboards (Insights)		✔

| Manager/Admin | Usage analytics dashboards | | ✔ |
| | Add, manage and deleted users and determine access control | | ✔ |

Vuforia Instruct

Role Type	Capabilities	Standard Registered User	Premium Registered User
Viewer	**Viewers can view procedures created by others but are unable to create or edit any procedures.**		
	Access to Vuforia Vantage App* & Desktop	✔	✔
	Procedure Execution	✔	✔
Author	**Authors have all Viewer Capabilities plus the following:**		
	Upload Assets		✔
	Add 3D CAD & 3D CAD Asset Management		✔
	Create and edit procedures		✔
Manager/Admin	**Managers have all Author Capabilities plus the following:**		
	Distribution and content management		✔
	Operations analytics dashboards (Insights)		✔
	Usage analytics dashboards		✔
	Add, manage and delete users and determine access control		✔

Vuforia Work Instructions

Vuforia Work Instructions provides access to the capabilities of both Vuforia Expert Capture and Vuforia Instruct.

Data Export

Customer may export Procedures from the Procedure Editor anytime during the Service Term to Word or any other digital format that may become available. Otherwise, Data will be deleted from the Service after expiration or termination of the applicable Service Period.

Success Services

PTC will provide the Success Services described in the PTC Customer Success Services Terms and Conditions posted on http://www.ptc.com/legal-agreements only to Customers who buy directly from PTC. Customers who purchase Vuforia Expert Capture, Instruct, or Work Instructions from PTC partners may be entitled to success services from such partners.

Security Measures

PTC follows the below standard security practices:

- Data in transit across open networks is encrypted
- Network and web application firewalls
- Configuration monitoring, network traffic logging and monitoring
- Authentication controls, authorization rules and auditing of administration actions

Vuforia Studio Hosted Offering

Vuforia Studio

There are different Vuforia Studio bundles: Starter, Basic, Premium, Professional and Enterprise. Each bundle includes the Vuforia Studio Experience Creator, the Experience Service (licensed on a Designated Server basis), Views 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 ThingWorx platform for user administration purposes only; 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. 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 General Terms and Conditions and these Offering Specific Provisions.

Definition of "View"

A "View" (also referred to as an "Experience" or "EXP") is a presentation of a mix of textual, numeric and 3D data that is presented to a user by the Vuforia View application. The View may include augmented reality interaction and/or "live" data from Things via ThingWorx. A View has a definite "entry point" which is invoked via a user action to select the View. This may be by selecting a "bookmarked" experience, following a scan of a ThingMark, or scanning a designated QR code. There is no definite "exit point" other than exiting Vuforia View or requesting another View. Invoking the same View within 15 minutes will count as a single View. Examples of Views include, without limitation:

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

Bundles

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

	Starter	Basic	Premium	Professional	Enterprise
Registered Users (included, more may be purchased separately)	20	100	200	1,000	10,000
Annual Views (for non-Registered Users)	2,500	5,000	10,000	50,000	100,000

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 must be issued to persons accessing the A/R experiences who are either (i) employees or contractors of or otherwise engaged by the Customer or (ii) who receive login accounts/passwords to the Customer's Studio instance.

Non-Registered Users

Customers may purchase additional public Views for consumption by individuals who are not Registered Users (up to the number of Views purchased).

Security Measures

PTC follows the below standard security practices:

- Data in transit across open networks is encrypted
- Network and web application firewalls
- Configuration monitoring, network traffic logging and monitoring
- Authentication controls, authorization rules and auditing of administration actions

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AR Vuforia Bundle SaaS Offering

The AR Vuforia Bundle SaaS Offering includes the below list of products and associated quantities:

-100 Vuforia Chalk Standard Registered Users
-100 Vuforia Studio Registered Users
-20 Premium and 80 Standard Registered Users for Vuforia Work Instructions
-1 Creo Illustrate Essentials (on-premise subscription)

Creo Generative Design Extension (GDX)

Introduction

This multi-tenant offering provides Customer access to the Generative Design Extension (GDX) in Creo Parametric. GDX is a cloud-based extension. To access GDX, the Customer must also have licenses for the Generative Topology Optimization (GTO) extension in Creo (purchased separately).

Solution Scope

GDX is available as a preconfigured, PTC-hosted package, including the following capabilities:

- Single user access per GDX package purchased
- Connection from the Creo client to the cloud
- Usage of cloud-based Generative Design solvers
- Storage allocation as specified below
- Standard Creo Support

Offering Basis

Purchase of GDX provides access to GDX for one Registered User per package purchased. Each package includes a number of credits (shared among all the users) for an account that can be used to run cloud-based solvers. The number of credits consumed depends on the amount and nature of computation completed on the cloud solvers. Customers can also purchase additional credits if they need more than what the GDX package provides. Use of more credits than purchased will result in overage fees.

Packages

There are two purchasable items for GDX:

- GDX package – includes access for one user and 20,000 credits for the entire account
- Credit add-on – Increases credit allotment for the account by the number of credits specified in the product description

Registered Users

Each GDX package purchased allows one Registered User to access the GDX functionality. Additional Registered Users can be added by purchasing additional GDX packages.

Credit Expiration/Overage

The credits (whether purchased separately or as part of the package) are specified on an annual basis and expire (if not used) on a contract-year basis. For example, without limitation, if the Customer has 120 credits and a three-year term, each contract year Customer may use up to 120 credits, but if Customer does not use the full allotment in a particular year, the unused credits will expire and will not roll over into the next contract year. In addition, if Customer exceeds its annual credit entitlement, PTC reserves the right to charge overage fees for the excess credit usage.

Security Measures

SoC-2 (Type 2) certification. PTC's ISO 27001 certification does not cover this offering and PTC's controls for this offering are not consistent with the ISO 27001:2013 framework.

Data Export

Upon approaching the end of the applicable Service Period, Customer may extract Data available for export. Otherwise, Data will be deleted from the Service after expiration or termination of the applicable Services Term.

Onshape Offerings

PTC's Onshape offering is a SaaS computer aided design and data management software platform. There are various editions, which are licensed as set forth below, and for a comparison of the features of the different editions, please see https://www.onshape.com/pricing.

Product Editions

Free Plan User
A "Free Plan User" is defined as a user of the free version of the Onshape offering. For the avoidance of doubt, users of free trial versions and/or users of the free education plan version of the Service are not Free Plan Users.

Onshape Standard
Onshape Standard is provisioned with one (1) user per account. This user has access to Onshape's core product development platform as an individual. They do not have access to any of the advanced data management, administrative controls, or analytics. Users on the standard edition may collaborate with Onshape Professional Users and Onshape Free Plan Users while (a) collaborating on a public document, or (b) granting the Free Plan User access to a Private Document owned by the subscribed user, where the Free Plan User will be restricted to view only.

Onshape Professional
Onshape Professional is provisioned with the number of users purchased in the order. One (1) owner of the account (i.e., the person whose email address is listed at the top of the Quote) will be responsible for adding additional Registered Users and delegating administrative permissions as needed. Onshape Professional accounts have access to some advanced data management and administrative controls, but no access to analytics. Users on the professional edition may collaborate with Onshape Standard Users and Onshape Free Plan Users while (a) collaborating on a public document, or (b) granting the Free Plan User access to a Private Document owned by the subscribed user, where the Free Plan User will be restricted to view only.

Onshape Enterprise
Onshape Enterprise is provisioned with a specific, unique domain as defined in the order, with a specified number of Full Users and Light Users purchased in the order. One (1) owner of the account (i.e., the person whose email address is listed at the top of the Quote) will be responsible for designating to PTC the unique domain, adding additional Registered Users and delegating administrative permissions as needed. Onshape Enterprise accounts have access to Onshape's advanced data management, administrative, and analytics. Users on the enterprise edition may not collaborate with other user types. A Full User can have any permission, including creating, uploading, viewing, editing, commenting, exporting, and analytics access. A Light User is restricted to viewing, commenting, and exporting.

Additional Terms
Customer's use of certain features or functionality of or relating to the Software may be subject to additional terms, including with respect to: (a) accessing and downloading any mobile application, including through or downloaded from the Apple App Store (an "Apple-Sourced Application") (as currently presented at https://www.onshape.com/legal/terms-of-use#apple_app_store); or (b) accessing any application via the Onshape online app store (as currently presented at https://www.onshape.com/legal/terms-of-use#onshape_app_store) (collectively, "Supplemental Terms"). Such Supplemental Terms may be presented to Customer for its acceptance when it signs up to use or initially uses such features or functionality. To the extent that Onshape modifies or adds any new features or functionality provided by a third party, at Onshape's reasonable request, Customer agrees to consider and negotiate in good faith potential changes to this Agreement that may be required thereby. To the extent that any features or functionality are provided by a third party, Onshape shall have no obligations or liabilities of any kind relating thereto. In addition, with respect to any Apple-Sourced Application, Customer shall only use such application (i) on an Apple-branded product that runs the iOS (Apple's proprietary operating system) and (ii) as permitted by the "Usage Rules" set forth in the Apple App Store Terms of Service.

Permissions and Public Documents
The Software enables Customer to specify the level at which access to and use of Customer Content is permitted to Users or possibly other customers. Customer is solely responsible for establishing the appropriate level of permissions to Customer Content. In addition, the Software may permit Customer to publish certain Customer Content, including in the form of a document designated for public sharing or otherwise published to the public (in each case, a "Public Document"). Any such Customer Content, once published or posted, is non-confidential. Unless Customer specifies alternate rights via an associated LICENSE tab for the relevant Public Document, then Customer hereby grants a worldwide, royalty-free and non-exclusive license to any third party accessing such Public Document to use the intellectual property contained in such Public Document without restriction, including the rights to use, copy, modify, merge, publish, distribute, sublicense or sell copies of such Public Document and permit others to whom such Public Document is made available to do the same. Onshape shall have no liability arising out of or relating to any third party use of any Customer Content or Public Document, or Customer's use of any other customer's content or other information. Onshape shall have the right to remove any Public Document that violates this Agreement or is otherwise objectionable, in Onshape's reasonable discretion.

Hosting Providers

Customer acknowledges that the Software is hosted by third party hosting providers (the "Hosting Providers"). Onshape may change its Hosting Providers at any time. Customer's use of the Software is subject to any applicable restrictions or requirements imposed by the Hosting Providers. Notwithstanding any other provision of this Agreement, Onshape shall not be liable for any problems, failures, defects or errors with the Software to the extent caused by the Hosting Providers. Customer acknowledges that the fees payable for the Software reflect the fact that Onshape is not responsible for the acts and omissions of the Hosting Providers.

Non-Production Environments

The Onshape offerings do not include non-production environments, unless PTC and Customer agree to the contrary in the Quote.

Security Measures

SoC-2 (Type 2) certification. PTC's ISO 27001 certification does not cover this offering and PTC's controls for this offering are not consistent with the ISO 27001:2013 framework.

Data Storage Entitlements

PTC does not limit data storage for the Onshape offerings.

Data Export Formats

For authorized Onshape data exports, the data export formats will be as specified at https://cad.onshape.com/help/Content/translation.htm