



## PTC CLOUD AND SaaS OFFERING SPECIFIC PROVISIONS

### Scope of this Document

This document sets out various terms and conditions that are specific to particular Cloud and SaaS offerings from PTC. 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.

If PTC is hosting software products that aren’t identified in this document, the licensing parameters specified in the PTC Licensing Basis Table (available at <http://www.ptc.com/legal-agreements/on-premise-license-agreements>) govern Customer’s use of such products.

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## PTC PLM Cloud Offering

The PTC PLM Cloud is available in two service packages:

- **PTC PLM SaaS – Premium:** This offering provides Customers with a PTC Windchill environment that is dedicated to the Customer, support deeper customization (such as with custom workflow processes and custom types) and where the user has more control over timing of upgrades. A minimum of 15 users is required for this dedicated option.
- **PTC PLM SaaS – Enterprise:** This offering provides Customers with a PTC Windchill environment that is dedicated to the Customer, includes the most comprehensive set of PLM capabilities and supports the deepest possible levels of customization and that supports integration with external on premise and cloud systems such as ERP and CRM. A minimum of 15 users is required for this dedicated option.

PTC PLM SaaS is currently offered in the following geographies:

- Americas
- Europe
- India
- Japan, Singapore, Australia, New Zealand

Additional information about the capabilities in the tables in the following pages.

Data Export: Upon approaching the end of the Services term (the “Service End Date”), 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 system, and (2) final export at Service End Date. Customer shall coordinate such requests with PTC. The data export 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, External file vault(s) contents. Customer may contract with PTC for additional non-standard data export. Fees are quoted respective of each occurrence. PTC will retain Customer’s Hosted Data for approximately 30 days following the last extraction, and then another approximately 60 days on backups.

Type	Capability	Premium	Enterprise
Viewer	<b>Viewers can view content created by others but are unable to create or edit any content (same behavior as Windchill PDMLink view &amp; print)</b>		
	View all web pages with content created in system	✓	✓
	Search across fields and indexed content and user-defined searches and search using part classifications	✓	✓
	Open for view or print any 2-D or 3-D representation in Creo View Light (cannot save annotations)	✓	✓
	Download any office content and any representations created from CAD formats (Native CAD content cannot be downloaded)	✓	✓
	View created reports	✓	✓
	View drawings, part CAD document and document information using out of the box Kinex Navigate View apps. <i>Custom viewing apps can also be used but must be approved by PTC cloud services prior to deployment in production.</i>	✓	✓
	View complaints and non-conformances		✓
	View suppliers, supplier status, preferred parts and preferred suppliers		✓
Contributor	<b>Contributors have all Viewer capabilities plus the following:</b>		
	Create and manage office documents. <i>The Microsoft Office Desktop Integration capabilities can be used but must be optionally enabled on request when the cloud instance is configured. Partners are responsible for assisting the customer with configuration of clients and in training for the use of desktop integration functionality.</i>	✓	✓
	Create folders, links	✓	✓
	Open and complete project and workflow tasks	✓	✓
	Create discussion forum postings	✓	✓
	Create and save markups/annotations in Creo View Light	✓	✓
	Create and edit problem reports (but not other change objects)	✓	✓
	Participate in change process tasks (such as review and approval)	✓	✓
	Participate in project planning activities (update and complete assigned activities)	✓	✓
Create and complete action items and create subscriptions for notification	✓	✓	
Create Non-Conformances and participate in CAPA processes (but not initiate CAPA)		✓	
Author	<b>Authors have all Contributor capabilities plus the following:</b>		
	Create and manage CAD documents using Creo, AutoCAD, Inventor, SolidWorks and NX workgroup managers for supported CAD versions <i>See Creo Version compatibility <a href="#">here</a> See AutoCAD, Inventor, SolidWorks and NX version compatibility <a href="#">here</a></i>	✓	✓
	Create and manage document configurations and baselines	✓	✓
	Manage simple release through promotion request process	✓	✓
	Create and manage collaboration projects	✓	✓
	Create and edit change items (change requests, change notices, problem reports, deviations and waivers)	✓	✓
	Create and edit parts and part structures	✓	✓
	Create and manage part structure configurations and baselines	✓	✓
	Create and edit project plans, activities, milestones and action items	✓	✓
	Create and manage team resources	✓	✓
	Create and manage suppliers and supplier parts		✓
	Create and manage complaints, Corrective and preventative actions and non-conformances		✓
	Create and manage security labels and agreements		✓
	Create and manage lot, serial and date effectivities		✓
Web-based Training	Web-based end user training accessible from PTC PLM SaaS services (all user types). Topics include: CAD data management, document management, product structure management, change management and project collaboration & management	✓	✓
Publishing	Creo format publishing (3-D Viewables, PDF, IGES, PDES, STL...) 1 CAD Worker instance is included which supports up to 50 Author Users (additional Creo CAD worker must be purchased for each additional 50 Author users)	✓	✓
	AutoCAD format publishing (No CAD worker required)	✓	✓
	SolidWorks publishing (CAD Worker instance and SolidWorks node-locked license required)		

	(1 SolidWorks CAD Worker instance is required for each 50 SolidWorks Author users)	<i>Additional cost</i>	<i>Additional cost</i>
	NX publishing (CAD Worker instance NX dedicated license required) (1 NX CAD Worker instance is required for each 50 NX Author users)		
	Inventor publishing (CAD Worker instance Inventor node-locked license required) (Inventor CAD Worker instance required for each 50 Inventor Author users)	<i>Additional cost</i>	<i>Additional cost</i>
	Automated PDF generation using Adobe LiveCycle	<i>Additional cost</i>	<i>Additional cost</i>
<b>Languages</b>	English, French, German, Spanish, Italian, Russian, Korean, Japanese, Chinese	✓	✓
<b>Committed Author minimum</b>	Customers must commit to pay each month for a minimum number of Author users	15 <i>Committed Authors</i>	15 <i>Committed Authors</i>
<b>Storage</b>	Storage included per committed user (Authors & Contributors only)	30 GB	50 GB

Category	Capability	Premium	Enterprise
Supported Configurations	Choose custom version schemes	✓	✓
	Define custom attributes (only for the system supported types)	✓	✓
	Define saved searches	✓	✓
	Define groups, roles and teams with custom access rules	✓	✓
	Define object initialization rules	✓	✓
	Configure lifecycle schemes	✓	✓
	Configure OOTB Navigate view apps for up to 10 roles with OOTB role-based configurations	✓	✓
	Define subtypes with type-specific attributes	✓	✓
Supported Customizations	<b>All customizations must be documented, submitted for review to PTC Cloud Services prior to production release. All customization must comply with Extended Cloud Services (ECS) policies.</b>		
	Custom workflow processes Workflow customizations must be reviewed and accepted by PTC Cloud services. Workflow customizations which create or edit information may not be accepted to prevent a compromise to data integrity and/or security, they should be implemented as custom helper services	✓	✓
	Custom publishing rules Only those publish rules that are created by PS / Partner, in compliance with the OOTB "PublishRulesSchema.xsd" schema, will be accepted, based on review and approval by PTC Cloud Services. Additional information about Publish Rules can be found in the Windchill Help Center.	✓	✓
	Query-builder supported queries	✓	✓
	Customizations using out of the box Info*Engine tasks Customizations using out of the box Info*Engine to create or edit information will be carefully reviewed by PTC Cloud Services and must be approved prior to deployment.	✓	✓
	Custom Navigate Apps (custom mashups)	✓	✓
	Custom Navigate Apps that integrate with other on premise or cloud enterprise systems (e.g., ERP)		✓
	Customizations using custom Info*Engine tasks Customizations using custom Info*Engine to create or edit information will be carefully reviewed by PTC Cloud Services and must be approved prior to deployment.		✓
	Customer directory integrations (e.g., LDAP) There is a cost associated with setting up and maintaining a VPN for this integration.		✓
	Customizations requiring code additions		✓
	Custom Solr indexing policies/rules (default indexing included for all)		✓
	Systems integrations (to on premise or cloud systems) Systems integrations are a supported option but there are additional costs associated with middleware, ESI module, setting up and on-going support of the integrations.		✓
Environments	1 – Dedicated Dev environment (non-scalable, non-clustered) w Creo CAD Worker	✓	✓
	1 – Production environment (scalable, clustered, multi-zone RDS)	✓	✓
Not Supported	<b>The following is not supported for all offerings:</b>		
	Site administration access in production system		
	Full organization administration access in production system		
	Direct application of customizations to production system		
	Custom ThingWorx apps that connect to physical devices		
Optional Services Supported (Fee-based services provided by partner and/or PTC)	Set up Dev/Test clone of production environment	✓	✓
	Data loading (e.g., CAD and document files—partner provided service)	✓	✓
	Content replication (setup of local file servers at other AWS Regions)	✓	✓
Data Extraction	Full File content extraction of all versions	✓	✓
	Full database extraction/dump	✓	✓



## PTC Windchill Quality Management Cloud Offering

Windchill Quality Management (WQM) Cloud is a SaaS offering for bringing medical products to market. The Validation Accelerator Package (VAP) covers the use of the out of the box processes and is built and supported by PTC’s third-party validation partner, USDM. User acceptance testing of the system and validation is to be performed by the Customer in coordination with USDM. Any change in scope 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.

**Solution Scope:**

The PTC WQM offering, provides the following processes in a preconfigured, validation-ready Cloud environment:

- Design Control
- Document Control
- CAPA/SCAR
- Nonconformance Management
- Complaint Management

The infrastructure for production use by customers will be hosted at the Amazon Web Services (AWS) Region supported by PTC Cloud nearest to where the order was placed to PTC.

**Licensing Model:**

WQM Cloud is licensed based on a “Monthly Active User” basis. A Monthly Active User is defined as any unique user who accesses the system during a particular month. A commitment of a minimum of 30 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 system for more than forty hours per month and may be subject to limitations in the system on particular functionality that they can access. There is no restriction on the amount of time in a given month or the functionality of the system that the Author user can access.

The standard offering includes two environments, one for development (non-scalable, non-clustered and including a Creo CAD Worker application), and one for production (scalable, clustered, multi-zone RDS).

The standard offering includes one CAD Worker instance which supports up to 30 Author users. Third-party CAD Workers must be quoted separately for each additional CAD tool requiring automated publishing of viewables. The Customer may also be required to secure licensing for 3rd party CAD to support the CAD Worker functions.

**Service Model:**

The WQM Cloud offering supports additional configuration, customization, and integration capabilities that are available in Windchill. In case of customizations and integrations, the Customer will be required to pay to PTC additional Extended Cloud Service (ECS) fees for run-time support, maintenance and upgrade of such customizations and integrations. Additional information about configuration and customization is provided in the Cloud Configuration table below:

Category	Capability
<b>Supported Configurations</b>  (included as part of offering)	Choose custom version schemes
	Define custom attributes (only for the system supported types)
	Define saved searches
	Define groups, roles and teams with custom access rules

Category	Capability
	Define object initialization rules
	Configure lifecycle schemes
	Define subtypes with type-specific attributes
<b>Customizations</b>	Customizations are not included and are not performed by PTC. Separate Extended Cloud Service contract and fee is required for support of these customizations
<b>Not Supported</b>	Site administration access in production system
	Full organization administration access in production system
	Direct application of customizations to production system
	Custom ThingWorx apps that connect to physical devices
<b>Optional Services Supported Fee-based services provided by a partner and / or PTC</b>	Set up Dev/Test clone of production environment
	Data migration/loading (e.g., CAD and document files—partner provided service)
	Data extraction services (in addition to the end-of-contract data export provided for below)
	Content replication (setup of local file servers at other AWS Regions)

**Data Storage Entitlements:**

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

**Overages:**

- **User Overage:** When more Active Users access the WQM Cloud service than the committed number of users in a month, Customer will be billed for the additional active users in arrears.
- **Data Storage Overage:** When the total storage used by the Customer exceeds the sum total of the storage entitlements of the committed Authors, Customer will be billed overage on the storage in arrears. Customer can buy additional storage separately at additional cost.

**Data Backup:** Application and data managed in the application will be backed up daily and the backups will be made available for recovery for up to thirty (30) days locally and 90 days remotely.

**Data Export:** Upon approaching the end of the Services term (the “Service End Date”), 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 system, and (2) final export at Service End Date. Customer shall coordinate such requests with PTC. The data export 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, External file vault(s) contents. Customer may contract with PTC for additional non-standard data export. Fees are quoted respective of each occurrence. PTC will retain the Customer’s Hosted Data for approximately 30 days following the last extraction, and then another approximately 60 days on backups.

## PTC FlexPLM SaaS and Other Retail SaaS Offerings

### PTC FlexPLM SaaS

The PTC FlexPLM SaaS offering is available in two service packages:

- **PTC FlexPLM SaaS – SMB:** This offering is made available through PTC resellers and provides access to a pre-configured FlexPLM environment. This offering is ideal for smaller customers who have 100 or less internal users and/or who don't need customization. A minimum of 10 internal users is required for this option.
- **PTC FlexPLM SaaS – Enterprise:** This offering provides Customers with a PTC FlexPLM environment that is dedicated to the Customer, supports the deepest possible levels of customization and that supports integration with external on-premise and cloud systems such as ERP and CRM.

Additional information about the capabilities is set forth in the table on the following page.

The FlexPLM “External Capacity User” license, which is available for both service levels, 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.

Registered Users of FlexPLM also receive entitlements to use certain role-based applications (e.g., the FlexPLM TechPack Access App). These applications are limited to use by Registered Users of FlexPLM and 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 install the ThingWorx server for the sole purposes of accessing FlexPLM data as applicable to the role-based applications and configuring details required for the role-based applications.

Overage Fees: PTC will count Customer usage of SaaS services on users' access – i.e. number of unique users who login to the system in a given month. Overages beyond the quantity purchased will be charged based on overage fees specified in the Quote.

Data Export: Upon approaching the end of the Services term (the “Service End Date”), 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 system, and (2) final export at Service End Date. Customer shall coordinate such requests with PTC. The data export 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, External file vault(s) contents. Customer may contract with PTC for additional non-standard data export. Fees are quoted respective of each occurrence. PTC will retain Customer's Hosted Data for approximately 30 days following the last extraction, and then another approximately 60 days on backups.



PTC FlexPLM SaaS Offerings – Included Capabilities		
Capability	SMB	Enterprise
Create and manage seasons, including the ability to copy, carryover, and move products and colorways from season to season	✓	✓
Create and manage Season Plans (aka assortment plans) and placeholders. Associate products to placeholders and adopt the associated products		✓
Create and manage product development tasks and milestones via calendar templates, calendar instances, and calendar dashboards	✓	✓
Create and manage season line boards	✓	✓
Create and manage products and their colorways	✓	✓
Create and manage colors	✓	✓
Create and manage materials, their suppliers, their color combinations, and their pricing.	✓	✓
Create and manage palettes and associate colors & materials to palettes	✓	✓
Create and manage suppliers	✓	✓
Create and manage change activities		✓
Create and manage environmental sustainability via product analytics (incurs additional costs)		✓
Create and manage documents and image pages	✓	✓
Create and manage product imagery via Adobe Illustrator integrations (incurs additional costs)	✓	✓
Create and manage product specifications, including Sizing, BOMs, Measurements, and Construction information. Generate Tech Packs from product specifications	✓	✓
Create and manage product and material samples	✓	✓
Create and manage 3D CAD documents and engineering parts and product structures		✓
Create and manage product sourcing configurations	✓	✓
Create and manage product cost sheets	✓	✓
Create and manage product & material test specifications and results		✓
Storage included	2 GB per Registered User	2 GB per Registered User
Ability to customize system look & feel and/or application logic		✓

## PTC Canvas SaaS

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.

All of the PTC Canvas service packages specified above are sold on the basis of the number of users who access such service package in a given month. Additional information about the capabilities is set forth below:

### **PTC Canvas – Core Capabilities**

- Create projects and boards within a project
- Upload images and video to boards
- Add web page hyperlinks to boards
- Create text and other annotations (e.g. drawn shapes) within boards
- Create color swatches within boards
- Share boards with internal and external users
- Create discussions with users to review feedback at project, board, and board item levels
- Review streams of trending imagery (aka Trend Streams) from social media platforms. Several streams will be provided out of the box. Streams feature is only accessible by internal users. Images from streams can be placed into boards.
- Export boards to PDF
- Export boards to a connected FlexPLM environment, where each board will be represented as an Inspiration Page within FlexPLM.

### Storage:

- 2GB of storage is provided per user

### **PTC Canvas – Trend Packs**

Trend Packs are packs of four tailored Trend Streams and 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. Tailored Trend Streams are streams that are customized to show imagery based on a category or topic provided by the Customer. For example, a Customer may want to see trending imagery for sports-related performance outerwear. In this case, a tailored Trend Stream would be created that collects relevant images and that Trend Stream would be delivered to the Customer via Canvas.

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.

As an example of how usage is counted for Trend Packs, if a Customer purchases one Trend Pack and, in a given month, each of the four Trend Streams in such Trend Pack has 10 unique active users, Customer would need to pay for (either as committed users or as overage users) forty active users.

### **PTC Canvas – Advanced PLM Integration**

- Retrieve data (e.g. Materials, Colors) from a connected FlexPLM environment for use on a board
- Create data (e.g. Products) in a connected FlexPLM environment from within Canvas

## Cloud Migration Service for PLM

Cloud Migration Service (CMS) for PLM is a service to migrate to PTC Cloud the Customer’s on premise Windchill or FlexPLM deployment with its configurations, customizations, integrations as-is, along with its data and database. PTC has standard offerings for this service if Customer meets the parameters specified below. Outside of these parameters, PTC and Customer would need to agree to a Statement of Work (and associated services agreement) for the migration services.

### Approach:

This service requires coordination and participation from PTC Cloud and the Customer’s teams in sharing the application knowledge, system details, and in performing user acceptance testing and end user communication in a timely manner. The PTC Cloud team will lead the migration project and work in accordance with PTC’s five-stage Cloud Migration Service best-practice approach. The scope of the migration project will be defined based on the Windchill deployment assessment PTC carried out as part of the ‘Assess’ phase of the Cloud Migration and will be executed under the following work streams: Assess, Export, Migrate, Validate, Go-Live (including Post Go-Live Support).

**Assumptions:** CMS for PLM is provided solely under the following assumptions:

- 1) The Customer’s current on premise instance of PTC software is an actively-supported version of such product. Upgrades are outside the scope of these services.
- 2) The migration will be of the modules deployed on premises. Addition or deletion of modules is outside the scope of these offerings.
- 3) Customer will execute a scan of its on-premise instance by running the WinDU tool and share the report with PTC. If the WinDU report generates failed (red) tasks and potential problem (yellow) tasks, Customer will be required to apply the best practice recommendations to “clean” its instance prior to start of the Cloud Migration Export phase.
- 4) Customer will provide a clean export of its Windchill environment to PTC following the instructions, in the media provided by PTC Cloud team.
- 5) Customer will provide approval to send the data to the PTC cloud environment in the PTC-approved media.
- 6) Customer is responsible to ensure all customizations and integrations are cloud ready, provide PTC with build package, installation instructions, configuration documentation, supporting requirements and user acceptance test (UAT) documentation of the custom components.
- 7) Data scrubbing is outside the scope of these CMS for PLM services.
- 8) Customer will not add data in excess of 10% more than the initial export during the migration process.
- 9) All data in end user Workspaces will be checked in by Customer prior to final export for production go-live.
- 10) Remote File Server (RFS) will be located at the nearest PTC supported AWS Region.
- 11) Customer will provide required third party software licenses as needed for the service.
- 12) All documentation PTC requires related to Customer’s system configuration, customization requirements and functional specifications, and UAT protocol will be provided by Customer to PTC in Microsoft Office product formats
- 13) Communications to end users about the system migration and required preparation will be managed by the Customer, after taking into account PTC’s suggestions and guidance.

### Pricing and Duration

Cloud Migration Services for PLM are priced based on the Windchill configuration, number of customization and integrations of the on premise deployment and other parameters specified in the table below. During the Assess Phase, PTC will categorize the Customer based on the following criteria. The Out-of-the-Box (OOTB) offering is provided free of charge to any existing Customer migrating its qualifying environment to PTC Cloud Services offerings. The other offering levels must be purchased by Customer.

Parameters	OOTB	Level 1	Level 2
LDAP Integration/SSO <sup>1</sup>	Included	Included	Included
CREO CAD Worker	Included	Included	Included
3 <sup>rd</sup> Party WGM, Worker	Cloud Supported	Cloud Supported	Cloud Supported
Customizations <sup>2</sup>	Up to 5	Up to 25	Up to 50
Integrations <sup>2/3</sup>	LDAP Only	Up to 2	Up to 4
Cognos Reporting	OOTB	OOTB	OOTB
Remote File Server (RFS) <sup>4</sup>	None	Up to 2	Up to 4
Production Server	1	1	1

1. LDAP integration moved as-is today. Changes in LDAP structure are outside the scope of the defined offerings above, and would require PTC and Customer to agree to a Statement of Work for the migration services.
2. It is Customer's responsibility (and PTC has no responsibility) for the following:
  - The quality of the code of the customizations
  - Requirements and design documentation
  - Test scripts documentation
  - Test results on the on-premise, deployed Windchill version
3. Integration to 'a' system. For OOTB, one integration to support a Corporate LDAP only.
4. Remote File Servers are available at PTC-supported AWS regions. If Customer installs Remote File Server at any other location (e.g., at Customer's premises), that would not qualify for any of the above offerings.

#### General Terms and Conditions for CMS for PLM Services

1. The PTC entity as set out in 10 a) of the Services Terms or the Additional/Different Cloud/SaaS Terms for Customers Outside of the United States of America ("PTC") will provide the CMS Success Services to Customer and the respective law specified there shall apply.
2. PTC may provide the CMS for PLM migration services subject to the conditions and assumptions as set out herein and shall invoice Customer as specified in the applicable PTC Quote. PTC reserves the right to (i) withhold the provision of services until all invoiced fees are paid and (ii) subcontract or delegate the performance of services to a third party.
3. The processing of personal data by PTC for Customer shall be governed by the terms of the PTC Privacy Policy or the respective data processing agreement available at [www.ptc.com](http://www.ptc.com).
4. The CMS for PLM migration services will be deemed to be accepted upon completion, at the latest upon expiration of an evaluation period of five (5) business days after the respective delivery, unless Customer provides PTC beforehand with a written notice specifying the reasons of non-acceptance (material reasons only). The warranty period following Customer's (deemed) acceptance shall be 30 business days, except in case of Customers in Germany, Austria and Switzerland where the warranty will be 12 months following acceptance.
5. PTC shall be liable only in the event of willful misconduct or gross negligence in accordance with applicable law. PTC shall not be liable for any special, incidental, punitive or consequential damages, including without limitation lost profits, lost savings or damages resulting from the loss or use of data or from project delays attributable in any manner to the performance of the Services. In no event shall PTC's liability for damages hereunder exceed the charges paid or payable for the service giving rise to such damages. Customer is responsible for creating and maintaining current and complete back-up files for any Customer data and programs that may be affected by PTC's performance of the services. PTC shall not be responsible for the protection or loss of Customer data or information. PTC's statutory liability for injury to life, body and/or health, and for the malicious concealment of defects, shall remain unaffected. Section 9(c) of the Services Terms shall apply.
6. PTC shall not be in default of its obligations to the extent its performance is delayed or prevented by causes beyond its control, including but not limited to acts of God, acts of Customer, fire, staff unavailability due to illness, or labor disturbances. The migration services may not be terminated without cause by either party.

## SPM SaaS Offering

SPM SaaS is offered as six packages that address three 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).

A brief description of each package is provide below.

- Servigistics SaaS SPM Commercial Foundation - Base SPM package for non-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

### Solution Scope:

Servigistics SaaS SPM Commercial Foundation	Servigistics SaaS SPM Commercial Aviation Foundation	Servigistics SaaS SPM Defense Foundation	Servigistics SaaS SPM Commercial Advanced	Servigistics SaaS SPM FA&D Advanced	Servigistics SaaS SPM Premium
Forecasting Optimization (MEO) Order Planning Last Time Buy (LTB) Insight Dashboards Global Part Chains	Forecasting (including Schedule Events) Optimization (MEO) Order Planning Last Time Buy (LTB) Insight Dashboards Global Part Chains	Forecasting (including Schedule Events) Optimization (MEO and ASO) Order Planning Insight Dashboards Global Part Chains	Commercial Foundation Plus: Advanced Forecasting, Advanced MEO Advanced Order Planning Cluster Based LTB Local Part Chains Connected SPM Network Optimization Service Parts Pricing	Commercial Aviation Foundation Plus: Advanced Forecasting Advanced MEO and ASO Advanced Order Planning, Cluster Based LTB Local Part Chains Connected SPM Network Optimization	All features including: Service Parts Pricing ASO K-Curve

### Licensing Model:

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

“PMI” is defined as Inventory Under Management and is the value of the service parts inventory that the Customer will manage in the system. This offering is priced 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.

“PXL” is defined as Parts multiplied by Locations where Parts are the total number of part numbers and locations are the total number of stocking locations that the customer has. This offering is priced in blocks of 50,000 PXL.

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.

The standard offering includes two environments: one for testing and one for production.

### Service Model:

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 Cloud Service (ECS) fees for run-time support, maintenance and upgrade of such customizations and integrations.

System Sizing and Data Storage Entitlements:

For PMI Based Pricing, regardless of package purchased, there is a 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:

	PMI (\$M USD)				
	0-24	25-50	51-100	101-200	201+
<b>PLPs</b>	Up to 1,000,000	Up to 1,000,000	1,000,0001 – 3,000,000	3,000,0001-9,000,000	9,000,0001-16,000,000
<b>Storage (GB)</b>	500	500	1,000	2,000	3,000

Data Storage Overage: When the total storage used by the Customer exceeds the storage entitlement, Customer will be billed overage on the storage in arrears. Customer can buy additional storage separately at additional cost.

Set forth below are certain limits on Customer’s use of the SaaS System. Customer may not exceed any of these constraints.

Feature	Area	Variable	Commercial Foundation	Commercial Aviation Foundation	Defense Foundation	Commercial Advanced	FA&D Advanced	Premium
General	All	PLP count	see below	see below	see below	see below	see below	see below
Concurrent users	All	number of concurrent users	150	150	150	150	150	150
Demand Management	SPM/SPP	history slices*PLPs * number of demand streams	600M	600M	600M	600M	600M	600M
Forecasting - General	SPM/SPP	forecast slices*PLPs* number of forecast streams	300M	300M	300M	300M	300M	300M
Inventory Optimization	SPM	IO scenarios*periods*PLPs	1000M	1000M	1000M	1000M	1000M	1000M
Time phased supply planning	SPM	time-phased PLPs * planning horizon	100M	100M	100M	100M	100M	100M
Order Planning	SPM	max (levels in part chain + location echelons)	100	100	100	N/A	N/A	N/A
Order Planning	SPM	max (parts in largest part chain * # locations in largest location echelon)	25,000	25,000	25,000	N/A	N/A	N/A
Interactive and Order Planning	SPM	max (levels in part chain + location echelons)	N/A	N/A	N/A	100	100	100
Interactive and Order Planning	SPM	max (parts in largest part chain * # locations in largest location echelon)	N/A	N/A	N/A	25,000	25,000	25,000
Causal Forecasting	SPM	product*bom size(parts on BOM)*install sites	1000M	1000M	1000M	1000M	1000M	1000M
Causal Scenarios Forecasting	SPM	number of Causal scenarios * product * avg bom * installsites	1000M	1000M	1000M	1000M	1000M	1000M
Scheduled Event Forecasting	SPM	products*events*avg event BOM size*installsites	N/A	500M	500M	500M	500M	500M
Price Streams and Offsets	SPP	PLPs*number of pricing streams	N/A	N/A	N/A	300M	N/A	300M
Pricing Monthly Financials	SPP	history slices*PLPs*number of pricing streams	N/A	N/A	N/A	600M	N/A	600M
Utilization Forecast	CSPM	Assets*causal factors*number of events	N/A	N/A	N/A	60M	60M	60M
Life Limited Parts Forecast	CSPM	number of Serial numbers*causal factors	N/A	N/A	N/A	1M	1M	1M

Concurrent Users – The number of users actively using the system at the same time.

Demand Management – Demand history is summarized in slices. Slices are monthly or weekly but the same for all PLPs.

Forecasting – General – Forecast slices are monthly or weekly and will be the same as the Demand slices. The number of Forecast Streams will align with the number of Demand Streams.

Inventory Optimization – Periods are typically months. The planning horizon determines how far into the future (weeks or months) that supply planning is calculated.

Time-Phased Supply Planning - Trigger-Based Supply planning is the other option. The planning horizon determines how far into the future (weeks or months) that supply planning is calculated.

Order Planning – Part chains have a minimum of 2 levels and no maximum. Foundation packages include Global Part Chain Feature while Advanced and Premium packages include Global and Local Part Chain Features. With Local Part Chain Feature not all Part Chains will apply to all location echelons.

Interactive Planning – This feature is only available in Advanced and Premium Packages. The variable and constraint is the same as for Order Planning.

Causal Forecasting – Causal Forecasting uses information about the install base (products, product bills-of-material (BOM), and install sites). The number of products, the number of parts on each BOM and the number of customer locations where products are tracked impacts processing.

Causal Scenario Forecasting – Causal scenarios allow for different versions of forecasts to be simulated.

Scheduled Event Forecasting – Schedule Event Forecasting uses information about planned events (ex. Maintenance). Products, event bills-of-material (BOM), and event schedules, and customer locations drive these forecasts and system processing.

Price Streams and Offsets – Price streams are used to model price levels for a part/location combination. Price streams are the same for all PLPs.

Pricing Monthly Financials – Demand history is summarized in slices. Slices are monthly or weekly but the same for all PLPs.

Utilization Forecast –Assets are not serialized. Utilization is forecasted based on historical events for one or more causal factors.

Life Limited Parts Forecast – Forecasts are generated at the serial number level for each causal factor.

Data Backup: Application and data managed in the application will be backed up daily and the backups will be made available for recovery for up to thirty (30) days from local copy and 90 days from remote copy.

Data Export: Upon approaching the end of the Services term (the “Service End Date”), 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 system, and (2) final export at Service End Date. Customer shall coordinate such requests with PTC. The data export 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. Customer may contract with PTC for additional non-standard data export. Fees are quoted respective of each occurrence. PTC will retain the Customer’s Hosted Data for approximately 30 days following the last extraction, and then another approximately 60 days on backups.

## Service and Parts Information SaaS Offering

The PTC Service & Parts Information SaaS offering is an integrated approach to providing PTC's world class Service & Parts Information solution in a software as a service (SaaS) model.

The offering is currently available only for the PTC Servigistics InService product (InService). The InService SaaS offering is focused on service and parts content delivery using the InService application. The offering is based on a pre-defined configuration. Customers can load service and parts information content from existing authoring / content management systems to InService using standard product loaders and deliver the information to the service network in a consolidated manner.

The offering includes a remote training/mentoring session with a PTC subject matter expert to help train the Customer administrator(s) on system administration, how to prepare the service information for loading and personalize the application for the company specific branding. This training/mentoring session supports the loading of 1 product, up to 500 service documents, and up to 5,000 individual part entries. Additional support, or integrations with other systems, can be contracted upon mutual agreement.

The InService SaaS offering is currently hosted in the following regions. The hosting location in case of global user distribution will be the closest, supported AWS region where the most number of users are located. Pricing is based in part on the hosting location, and so if Customer would like to elect a different hosting location than what was originally quoted, additional fees may be required.

- North America – East (Virginia), West (Oregon)
- Dublin, Ireland
- Frankfurt, Germany
- Tokyo, Japan
- Singapore
- Sydney, Australia

The InService SaaS foundation includes hosting of one high availability clustered deployment for production InService environment and a scaled down split deployment sandbox environment for training, testing, development and other non-production purposes.

The licensing model of this offering is based on an initial foundation purchase that includes a specified number of Registered Users. Additional Registered Users may be purchased, either on a committed basis or as overage.

In addition, Customer may purchase Login Events for Public Users, both of which are defined below.

Also, the InService SaaS foundation includes an allocation of data storage. Additional data storage may be purchased, either on a committed basis or as overage.

There are also limits in the offering on data transfer rates for data being downloaded from the offering. The standard offering allows for 3 TB of data transfer per month. Additional data transfer capacity may be purchased, either on a committed basis or as overage.

Overage for Registered Users is measured on a monthly basis. Overage for Login Events is measured on an annual basis.

**Registered User** – The Service may only be used by individual, named registered users 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. A license is required for each individual who accesses a Registered User product or the data contained therein, whether directly or through a web portal or other mechanism for "batching" or otherwise achieving indirect access to the Licensed Product or such data. Generic or shared log-ins are not permitted.

**Public User** – A user of the InService SaaS offering who is not a direct member of Customer's service network. Service network includes but is not limited to Customer's direct service technicians, authorized dealers and service providers.

**Login Event** – A login event is an act by a Public User of authenticating with the user credentials to get access to the InService SaaS offering.

**Data Export:** Upon approaching the end of the Services term (the "Service End Date"), Customer can request two data exports: (1) prior to Service End Date an export for purposes of testing the input of that data into Customer's system, and (2) final export at Service End Date. Customer shall coordinate such requests with PTC. The data export 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, data directory contents. Customer may contract with PTC for additional non-standard data export. Fees are quoted respective of each occurrence. PTC will retain Customer's Hosted Data for approximately 30 days following the last extraction, and then another approximately 60 days on backups.

## **Internet of Things Cloud Offerings**

ThingWorx hosted offerings are priced on the same basis as on-premise licenses, as specified in the PTC Licensing Basis Table (available at <http://www.ptc.com/legal-agreements/on-premise-license-agreements>). However, notwithstanding anything to the contrary in the Licensing Basis Table, only one Instance is provided for non-production purposes, unless additional non-production Instances are purchased.

## Creo in the Cloud Offerings

Creo in the Cloud is an integrated approach to providing the full capabilities of PTC’s world class CAD software as a service (SaaS) in a secure and highly available infrastructure.

### Licensing Model:

The Creo in the Cloud software is licensed on a registered user basis, meaning that each individual who is authorized to access the service needs to be assigned their own unique log-in and counts towards the number of users in the system. The registered user licenses will be purchased with the following attributes (as specified in the product description of the PTC quote): (i) package type (Engineer IIIc or Engineer IVc), (ii) instance type (Pro 16GB or Air 8GB), and (iii) number of committed monthly Hours per registered user. An additional attribute is the data center location that the registered user is connected to (determined as specified below).

This is a SaaS offering, and the Customer’s access to the software is solely via the PTC hosted system. Customer may not use license files or licenses that it purchases independently of this offering in connection with the Creo in the Cloud offering.

Engineer IIIc and Engineer IVc. These registered user packages have the following capabilities included:

Package Entitlements	Engineer IIIc	Engineer IVc
<b>Creo Parametric</b>	✓	✓
<b>Flexible Modeling</b>	✓	✓
<b>Manikin</b>	✓	✓
<b>Advanced Assembly</b>	✓	✓
<b>Behavioral Modeling</b>	✓	✓
<b>Mechanism Dynamics</b>	✓	✓
<b>Interactive Surface Design</b>	✓	✓
<b>Piping &amp; Cabling</b>	✓	✓
<b>Simulation</b>		✓
<b>Tolerance Analysis</b>		✓
<b>Mathcad</b>		✓
<b>Storage Allocation (10 GB/User)</b>	✓	✓

### Allocation and Calculation of Hours:

- There will be aggregate pools of Hours for registered users who are connected to the same data center and on the same instance type (all registered users in the same data center and on the same instance type being part of the same “Group”). If the number of Hours used by such Group in a contract year exceeds the aggregate number of Hours purchased by Customer for such Group, Customer will be charged for the overage.
- Thus, for example, if Customer has 20 registered users (half Engineer IIIc and half Engineer IVc) connected to the US data center on Pro 16GB, and Customer has committed to 30 Hours per month per registered user, such Group can use up to 7,200 Hours in a contract year, and any number of Hours used above such amount will be charged as overage. However, if half of those registered users are instead connected to the EU data center or are instead on Air 8GB, then those users would be in a different Group, and each Group would be able to use up to 3,600 Hours in a contract year.
- Hours may not be shared among different Groups of registered users.
- “Hour” is defined as follows:
  - Hours are measured in full hour increments.
  - Hours are consumed when an instance type is turned on, regardless of whether the registered user is connected for the full hour or just a part of the hour.
  - Thus, for example, a registered user who accesses the system for five minutes will consume a full Hour. However, if the instance such registered user is accessing is within that hour accessed by the same or another registered user, then such registered user will continue in the Hour previously activated. For example, if registered user #1 accesses an instance for 10 minutes and then logs off, and registered user #2 logs on during the remainder of that hour, registered user #2 will be connected to the same instance and, unless registered user #2 goes beyond the remainder of that hour, no additional Hour will be consumed.
- Unused Hours in a contract year may not be rolled over from one year to the next.

Storage Entitlements: Each registered user may use up to 10 GB of storage space. Storage allocation that is not used by one registered user may not be used by other registered users. Files may be saved outside of the Creo in the Cloud offering in order to minimize storage usage.

Data Backup: Storage will be backed up daily and the backups will be made available for recovery for up to seven (7) days. This requirement supersedes anything to the contrary in the PTC Cloud/SaaS Security and Support document.

Overage Rates:

- User Overages:
  - Where more registered users of a particular type (e.g., Engineer IIIc on Pro 16GB in the US data center) access the system than purchased in a given month, Customer will be billed for the additional registered users at the same per user fee as the committed amount, or if no registered users were purchased for that geography, then the overage fee will be PTC's then-current applicable fee for that geography. Thus, for example, if Customer bought ten Engineer IIIc on Pro 16GB in the US data center and had eleven registered users of that type access the system, Customer will be billed for an additional registered user with the same number of committed Hours, regardless of the number of Hours actually used by that registered user.
  - If there are two package types on the same account, Customer will be charged overage at the higher package rate. For example, if Customer purchases five Engineer IIIc and five Engineer IVc users and puts them all in the same account, if an eleventh user accesses the system, the overage fees for that user will be presumed to be Engineer IVc.
- Hour Overages:
  - For Hour overages among a Group of registered users, the excess number of Hours will be billed at the overage rate specified on the PTC quote.
  - For example, if Customer has a Group of registered users who together are allocated 100 Hours in a given contract year, but use 105 Hours in such year, Customer will be billed for the additional 5 Hours.
  - As another example, if Customer has ten Engineer IIIc on Air 8GB in the US data center, and Customer sets up a registered user on the Pro 16GB instance, then all of such registered user's Hours are overage Hours because Customer did not purchase Pro 16GB Hours.
- Data Storage Overage: Data storage overage will not be possible. That is, the system will not permit a registered user to exceed the the number of GB of storage purchased for that registered user.

Geographical Limitation:

- The pricing for each registered user is based in part on which data center (US, European Union, Japan or Asia Pacific) such registered user is connected to. The data center used will be based on the currency in which the registered user is quoted. For example, a registered user quoted in US dollars will only be entitled to access the PTC US data centers.

Creo Extensions: Creo extensions are licensed on a concurrent or node locked basis, as specified in Customer's Quote. Concurrent-licensed extensions are priced for either one-country or global usage, also as specified in Customer's Quote. When the Creo extensions are licensed for global usage, in each PTC data center the Customer is authorized to access PTC will install and make available to Customer the full number of floating extensions purchased. It is Customer's responsibility to manage the usage of global extensions to ensure that the number of Customer users accessing the global extensions do not at any given time exceed the number of concurrent licenses purchased.

Data Export: The design data and other information created in Creo in the Cloud is stored in the 10 GB user specific persistent storage attached to the user account or Windchill PDMLink deployed on premise or in the PLM Cloud managed by PTC. Upon approaching the end of Services term (the "Service End Date"), Customer can copy the persistent storage data from each user's persistence storage area to their company network drive. If data is managed in Windchill PDMLink on premise they have complete access and control over the data and if in PLM Cloud they will adhere to the PLM Cloud data export policies. PTC will retain Customer's Hosted Data for 7 days following the Service End Date.

## Creo AR Design Share

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

Product	Availability	Publishing Admins	Publishers	Published models allowed	Control
Creo AR Design Share - free	Free to every seat of Creo 4.0 M010+	1	1	5	<ul style="list-style-type: none"> <li>Only 5 models can be hosted on free experience server at one time and each will expire 6 months after it is published</li> <li>Customer has no control over deleting published models; when the sixth model is published, the oldest published model hosted on the server will be automatically deleted</li> <li>Once published, the model is viewable by anyone. There is no password or other protection.</li> </ul>
Creo AR Design Share - Individual	For purchase with Creo 4.0 M040+	1	1 (same person as Admin)	10	<ul style="list-style-type: none"> <li>Admin/Publisher has full control over the published models, and can delete any models at any time</li> <li>Access to published models can be restricted by the Admin/Publisher</li> </ul>
Creo AR Design Share - Enterprise	For purchase with Creo 4.0 M040+	1	Unlimited	50	<ul style="list-style-type: none"> <li>Admin has full control over all account models, and can delete any models at any time</li> <li>Publishers have full control over models they have published, and can delete any models they published at any time</li> <li>Admin can add/delete any Publisher at any time</li> <li>Access to published models can be restricted by the Admin/Publisher</li> </ul>