



Feature Scope Description | PUBLIC
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Feature Scope Description

Content

1	Document History.	3
2	Introduction.	4
3	About This Document.	5
4	SAP Product Lifecycle Management Features by SaaS Application.	6
4.1	Collaboration.	6
4.2	Configuration Management.	7
4.3	Connected Products.	8
4.4	Engineering.	10
4.5	Enterprise Product Structure.	11
4.6	Insights.	13
4.7	Intelligent Handover.	13
4.8	Product Innovation Management.	14
4.9	Specification Management.	15
4.10	Visualization.	17
4.11	Cross-Product Features.	19

1 Document History

⚠ Caution

Make sure you have the latest version of this document. You can find the latest version at the following location: https://help.sap.com/plm_epd

The following table provides an overview of the most important document changes.

Version	Date	Description
2.0	2024-02-17	New features in the Product Innovation Management and Specification Management chapters
1.0	2024-02-05	First version for SAP Product Lifecycle Management

2 Introduction

SAP Product Lifecycle Management is a cloud solution that enables you to digitally orchestrate your product development, from design to operate, resulting in reduced time to market, higher R&D return on investment, higher margins, and reliable product launches.

SAP Product Lifecycle Management comprises multiple SaaS applications that each group related features in the product lifecycle process.

3 About This Document

This feature scope description shows you which features are provided with SAP Product Lifecycle Management.

In addition, it constitutes the product documentation for SAP Product Lifecycle Management, as defined in the General Terms and Conditions for SAP Software ("GTC").

Licenses

Note that you may need a separate subscription license for certain features. Please contact your SAP Account Executive for further information.

Integration

SAP Product Lifecycle Management supports integration with other SAP or non-SAP products. Note the following:

- Other products mentioned in this feature scope description might have their own product lifecycle, their own localization versions, or their own language scope, and are therefore named only as an example or as currently integrated.
- Integration with other products might be subject to a change with the next release of SAP Product Lifecycle Management.
- You might need an additional license for other products.

For further information, please contact your SAP Account Executive.

4 SAP Product Lifecycle Management Features by SaaS Application

SAP Product Lifecycle Management provides features in the cloud for managing the lifecycle of your products. Each SaaS application provided by SAP Product Lifecycle Management groups the features that are related to specific tasks or phases in the lifecycle process of your products.

4.1 Collaboration

Introduction

A SaaS application of SAP Product Lifecycle Management that allows you to instantly collaborate with participants, within and outside your organization, to accelerate product innovation.

Feature	Description
Collaboration	Create and use virtual spaces to collaborate with people in your organization, and across your extended enterprise.
Document Collaboration	Store, share, and review engineering documents in collaborations. Manage document versions by creating one or more versions for the base version of a file.
Collaborate with Participants	Invite participants to collaborations, where participants are your stakeholders such as original equipment manufacturers (OEMs) and business partners, internal or external to your organization.
Workflow-based Collaboration	Add workflows to collaborate using a process driven approach to facilitate easier communication between stakeholders. Use an integrated inbox to process work items and make business decisions.
Product Data Collaboration	Collaborate on product data such as bills of material (BOM) and order BOM, and enable internal and external stakeholders to propose changes using redlining.
Specification Exchange	Collaborate on provisional specifications with your suppliers to shorten the time until a new or updated specification can enter the system.

Feature	Description
Transfer data (currently, using Product Package Exchange)	<p>Enables users to work with product data from an external data source (currently, SAP ERP). This includes, for example:</p> <ul style="list-style-type: none"> • Redlining • Downloading data • Working on the data in collaborations
Process visibility capability within the SAP Workflow Management service	Build workflow-based business scenarios (currently using Process Visibility) to gain end-to-end visibility of their statuses and to follow up on real-time events.

4.2 Configuration Management

Introduction

Configuration Management is a SaaS application provided by SAP Product Lifecycle Management. It helps the configuration manager to create and maintain configuration plans, lifecycle phases, and baselines.

Feature	Description
Maintain configuration plans	Create and maintain configuration plans.
Create and manage lifecycle phases	Create and manage lifecycle phases within a configuration plan.
Create and assign baselines	Create and assign a baseline to a lifecycle phase.
Maintain baselines	Create, delete, and update baselines for multilevel product structures (engineering/design or production) that can be synchronized from the source system.
History	View the change log of a configuration plan or a baseline.
Attachments	Attach files to configuration plans and baselines.
Pull master data objects	Assign relevant objects that describe the products in the respective phases: product, product structure, and document information including originals.
Manage statuses	Manage the status of a configuration plan, a lifecycle phase, or a baseline.
Export lists	Export the configuration plan or baseline list view as a spreadsheet.
Add comments	Add comments to configuration plans and baselines.
Navigation to view 3D models of parts and assemblies	Navigate to the Visualization and Enterprise Product Structure SaaS applications to view 3D models of parts or assemblies.
Collaboration integration	Assign a baseline as a reference object to a collaboration.

Feature	Description
Configure Baselines and Configuration Plans	Create, edit, and copy baseline profiles as well as lifecycle phase templates to improve standardization.
Integration with an external data source, currently SAP ERP, SAP S/4HANA, or SAP S/4HANA Cloud	Read certain change management, bill of material, document, plant, and product data from an integrated external data source.

4.3 Connected Products

ⓘ Note

These features are only available to customers who subscribed to this SaaS application before February 5, 2024. For more information, contact your SAP Account Executive.

Introduction

The Connected Products SaaS application enables development and monetization of digital twins.

It provides functionality for efficiently creating digital products by combining IoT with engineering models. To make this possible, products are digitized, which means that an IoT-enabled engineering model of a physical product is connected to its real-world physical twin via sensors.

Connected products enable OEMs (original equipment manufacturers) to monetize digital twins by creating new business models, such as Product-as-a-Service, to provide outcome-based offerings.

Digital twins are also leveraged to close the engineering loop by monitoring products and feeding their usage data back to the manufacturer, which in effect enables faster product development. At the same time, the content is made available for operators to use for predictive services in the asset management space.

Feature	Description
Simulation-based digital twins	Create engineering simulation models of assets in operation (finite element models), currently using the connected products modeler tool.

Feature	Description
Health analysis with physical and virtual sensors	<p>Analyze the condition of equipment using physical and virtual sensors.</p> <p>A virtual sensor – not unlike physical ones – is a device that can be placed at a specific location on an item of equipment to provide a continuous reading of the physical state of the equipment at this location (for example, with regard to motion, reaction forces, or strain). Embed these simulation models in an IoT infrastructure, and deploy digital twins for advanced engineering insights.</p>
Vibration analysis with spectrograms and frequency spectrums	<p>To analyze emerging malfunctions, vibration experts can use spectrograms and frequency spectrums based on a Fast Fourier Transformation (FFT).</p> <p>FFT is an algorithm that calculates a spectrum from a time waveform, that is, it converts a signal from the time domain into the frequency domain.</p>
Alert handling to support digital inspections	<p>Carry out digital inspections by identifying equipment that has open alerts, for example, when equipment is subjected to high structural loads.</p> <p>Engineers can analyze the impact of an alert by viewing on a chart the stress levels recorded during the time frame of the alert.</p>
Dynamic 3D visualization for engineering simulation models	Visualize and present actual and simulated system behavior including post-processing capabilities of engineering simulation models, for example, FEA (finite element analysis).
Lifecycle management for connected products	Original equipment manufacturers (OEMs) can manage the lifecycle of connected products by creating and managing connected product templates and instantiating the connected products based on the templates.
Integration with an external source of master data, currently either asset central foundation or SAP S/4HANA (the latter through integration with SAP Asset Performance Management)	Embed these simulation models in an IoT infrastructure, and deploy digital twins for advanced engineering Repositories for all information about assets and equipment to enable effective collaboration between OEMs and operators
Subscription billing	Through an integration with an external solution, currently SAP Subscription Billing, original equipment manufacturers (OEMs) can monetize their digital services by enabling usage-based or time-based subscription billing for their operator business partners.
Sharing connected products among business partners	Through an integration with an external network, currently SAP Business Network Asset Collaboration, OEMs can enable their business partners, for example, equipment operators, to view charts and view and process alerts for their own equipment.

4.4 Engineering

Introduction

With the Engineering SaaS application, you can effectively incorporate the experience data related to products and their users, thus consolidating the true voice of the customer into products.

The Engineering SaaS application provided by SAP Product Lifecycle Management enables you to use the following functions:

Feature	Description
Requirements-Driven Development	<ul style="list-style-type: none">• Manage requirements by creating requirements models.• Assign requirements and other model objects to external business objects to support requirements traceability. Requirements traceability enables you to manage the relationships between the requirements and the associated objects in your development.• Run impact and lineage analysis - You can launch an impact and lineage analysis on requirements, model objects and other associated business objects.• Edit one requirement model concurrently.• Check requirements quality, retrieve suggestions, and configure rules for checking.• Use the traceability view to create and maintain traceability links for requirements and SysML block definition diagrams.
Standard-Based Requirements Exchange	<p>This feature enables you to transport requirements between different requirements management tools. You can:</p> <ul style="list-style-type: none">• Import and export requirements using a Requirements Interchange Format file.• Import requirements and associated information from a text file.

Feature	Description
Model-Based Systems Engineering	<ul style="list-style-type: none"> • Use requirement diagrams to visualize the hierarchy and other relationships between all or some of your requirements. • Use block definition diagrams to design and analyze system structures. • Use use case diagrams to describe the usage of a system by providing a graphical view of how actors interact with the system to achieve their goals. • Use internal block diagrams to specify the internal structure of a single block in your system model. • Use parametric diagrams to convey the constraints information of your system. • Use state machine diagrams to specify how a system or sub-system changes its state over time in response to different events. • Use activity diagrams to review and analyze the behaviors of a system by describing actions and flows involved in its activities. • Use sequence diagrams to describe system behaviors by modeling the interactions between the participants (systems, sub-systems, and actors in the associated environment). • Use package diagrams to describe the relationships between packages in a model. • Use variant management models to create product variants.
Test Management	<ul style="list-style-type: none"> • Check test cases coverage. • Create and manage test artifacts. • Plan and execute tests against product requirements. • Analyze test results and stay connected with product development.

4.5 Enterprise Product Structure

Introduction

The Enterprise Product Structure SaaS application provided by SAP Product Lifecycle Management lets you synchronize product and its details from an external system (currently SAP S/4HANA or SAP ERP) to SAP Product Lifecycle Management. Additionally, you can manage various product versions created at key points in the product lifecycle.

Feature	Description
View Product Structure	<p>View an expanded product structure and its components for a specific validity.</p> <p>You can also add an image as a thumbnail for a product version.</p>
Creation and Management of Product Structures	Create and manage product structure for configurable products, which includes defining its various components like modules, variation points, variants, and products. Additionally, you can define product configurations by selecting the relevant variants using the variant matrix.
Navigation	Browse the folder hierarchy of products to find a product and view its BOM structures and other details.
Search	Find a specific product structure and its details by using search filters, such as folder name, product ID, product type, change number, revision, and so on.
Import and storage	Import selected product structures into SAP Product Lifecycle Management to make product structures available on the cloud.
Management of folder hierarchy	Organize products into a folder hierarchy for easy access.
Product Versioning	Manage and track versioning of products throughout their product lifecycle. When synchronizing with an external source system, a new product version is created with each revision change while retaining the permanent record of the state of the older product versions.
BOM Versioning	Manage and track BOM versioning from its new BOM version. When synchronizing with S/4HANA systems, a new BOM version is created with an engineering change number.
Integration with Visualization SaaS application	<p>Generate a 3D model and thumbnails for CAD parts.</p> <p>When viewing a BOM explosion, you can dynamically generate a 3D model from the BOM explosion to allow for visual navigation of the BOM in a 3D model. The Visualization integration also offers a bidirectional selection that lets you select a component by clicking in either the product structure tree or in the 3D viewport.</p> <p>Toolbar with options like measurement tool, pan, cross section, cross section, and so on, are also available for users.</p>
Integration with an external data source, currently SAP S/4HANA, SAP ERP, or SAP S/4HANA Cloud	Read certain change management, BOM, document, plant, and product data from an integrated external data source.

4.6 Insights

Introduction

The Insights SaaS application for SAP Product Lifecycle Management enables you to access and analyze product-related information, so that you can make smarter business-related decisions and get your work done faster.

Feature	Description
Quick access to product-related information for analysis and decision-making	Central access point (currently SAP Build Work Zone, advanced edition) to access the following: <ul style="list-style-type: none">• Objects, for example, collaborations, that need attention• Consolidated information that is related, for example, to a product's lifecycle
Insights into change management processes	View graphical representations of aggregated change record data from an external data source (currently, SAP S/4HANA).
Insights into your collaborations	Get quick access to aggregated information about the collaborations that you participate in.
Insights into your product innovations	Get quick access to aggregated information about ideas in your campaigns.
Insights into your requirements	Get quick access to aggregated information about the requirements models that you are working with and their requirements.

4.7 Intelligent Handover

Introduction

A SaaS application of SAP Product Lifecycle Management that allows you to plan and initiate handover of data from the source structure to the target structure in the product lifecycle management (PLM) process.

As a production engineer, you can derive and maintain the manufacturing bill of material (MBOM) as the target from the engineering bill of material (EBOM) as the source and assign routing to the MBOM.

Feature	Description
Integration with an external data source, currently SAP ERP, SAP S/4HANA, or SAP S/4HANA Cloud	<ul style="list-style-type: none"> Search and filter of BOMs from an integrated external data source. Load the source BOMs and publish the target BOMs to the integrated external data source.
Support fabricated planning	Modify or make up components from their original state to another; for example, BOM items changed to BOM assembly in the MBOM.
Initiate handover activity	Derive or create an MBOM for a specific target plant from the source EBOM.
Expand source BOM structure	Expand the source BOM in a multilevel hierarchy and manage the handover activity of the BOMs.
Plan for multilevel target MBOMs	Create multilevel target MBOMs in the external data source (SAP ERP, SAP S/4HANA, or SAP S/4HANA Cloud) on completion of planning of the target MBOM.
Incorporate changes	Compare and incorporate the changes initiated in the EBOM to the MBOM using the change incorporation function.
Edit BOM details	Maintain the values for a subset of BOM item attributes.
Add BOM items	Add BOM items by searching for the materials present in the external data source (SAP ERP, SAP S/4HANA, or SAP S/4HANA Cloud).
Planning target BOM items	<ul style="list-style-type: none"> Drag and drop the components from the source BOM to the target BOM. Simulate the source structure as the target structure (plan as designed). Select the components from the source to create the target MBOM structure. Restructure the BOMs in the planned target. Manage routings.

4.8 Product Innovation Management

Introduction

With the Product Innovation Management SaaS application for SAP Product Lifecycle Management, you can have a streamlined process for managing ideas and campaigns.

Feature	Description
Submit Ideas for Campaigns	<ul style="list-style-type: none"> • Submit ideas for a campaign • Vote on ideas • Comment on ideas • Invite idea coauthors
Manage Campaigns	<ul style="list-style-type: none"> • Set up a campaign • Assign idea submitters to submit ideas • Manage all the ideas and categorize ideas by tags • Assign experts to review and evaluate ideas • Send email notifications to submitters and experts • Create needs based on ideas • Create requirements based on needs, and link needs to requirements • Create items in external project management tools (currently, Jira software) based on needs, and link needs to the items
Evaluate and Score Ideas	<ul style="list-style-type: none"> • Evaluate and score assigned ideas • Vote on ideas • Comment on ideas
Perform Settings	<ul style="list-style-type: none"> • Define questionnaires • Define phases • Define tags • Define additional idea fields

4.9 Specification Management

Introduction

With the Specification Management SaaS application for SAP Product Lifecycle Management, you can manage the diverse range of data that represents your product and collect the various parameters that define it. Specification Management allows you to manage product-relevant information such as raw materials, semifinished goods, and packaging, and to make sure they're stored in a structured, secure way.

Feature	Description
Manage specifications	<p>Create, update, delete, and version specifications.</p> <p>Create specification copies.</p> <p>Create specification types that determine the properties of a specification.</p> <p>Categorize specifications according to product category.</p> <p>Use status profiles for specifications defined in Status Management.</p> <p>Upload documents and product image thumbnails to specifications.</p>
Configure and manage properties and compositions	<p>Define and group properties in multi-level property trees, and assign them to specification types.</p> <p>Add a standard list of values to properties, such as units of measure, dimensions, minimum and maximum values.</p> <p>Define properties in various languages, and based on validity.</p> <p>Group composition items by composition item groups, and classify them by composition item types.</p>
Categorize products	<p>Assign a product category to specifications.</p> <p>Categorize products according to industry standards, line of business, or customer-specific grouping.</p> <p>Define a hierarchical product category structure.</p> <p>Add properties to product categories.</p> <p>Filter property trees in specifications by product category to only display relevant properties.</p>
Manage units of measure and value qualifiers	<p>Maintain value qualifiers for composition items in the specification, such as measured, certified, warning, etc.</p> <p>Use Unit of Measure and dimensions to accurately describe and interpret property information about products and substances in a variety of ways.</p>
Manage phrases	<p>Define phrases with multiple translations.</p> <p>Define phrase collections.</p> <p>Assign the phrases to phrase collections, so that the collections can be used in character-based properties.</p> <p>Import phrases and phrase collections using Microsoft Excel.</p>

Feature	Description
Manage statuses	<p>Define a status profile, which is a set of sequential lifecycle statuses.</p> <p>Assign that status profile to a certain specification type.</p>
Define authorization contexts	<p>Create authorization contexts to control access to specifications. Users and user groups added to them can then access specifications only with certain product categories, specification types, and specification versions.</p> <p>Fine-tune what users and user groups can do when accessing specifications by choosing whether they are authorized to create, read, update, delete, or create new versions.</p>
Read product master	Read product masters from an external data source (currently, SAP ERP, SAP S/4HANA, or SAP S/4HANA Cloud), and assign them to specifications.
Find specifications	Search for specifications based on property attributes.

4.10 Visualization

Introduction

The Visualization SaaS application provided by SAP Product Lifecycle Management is a bundle of services and applications for working with 2D and 3D visualizations. Visualizations include 2D images and drawings, and 3D models and photos.

The services enable cloud storage and publishing of the data for use in different contexts, as well as creation of automated business workflows around the data.


The applications allow efficient importing of visualizations by end-users, and enrichment of the content with business relevant information to drive valuable user interactions with the data.

Feature	Description
Delivery	<ul style="list-style-type: none"> Browse content View visualization content
Visual Navigation	View visual content and navigate between views, or between different visualizations. Users can also navigate to third-party applications.

Feature	Description
Visual Analytics	View visual content and analyse business data connected to visualization parts. The business data can come from third party services as well.
Conversion and Storage	<p>Import files in supported formats, enabling advanced cloud-content creation and cloud-based capabilities such as:</p> <ul style="list-style-type: none"> • Streaming: Rendering occurs while visualization data is being retrieved, providing a usable visual representation while data is still being loaded. • Client-side filtering: Only the data needed in a particular viewing context is retrieved. • Undoable modifications to visualization data.
Association	<p>Associate visualizations and objects within visualizations with business data from external applications.</p> <p>Business data association enables visual navigation of business data and integration with external applications. This allows visually enabled solutions for scenarios such as:</p> <ul style="list-style-type: none"> • Ordering of spare parts • Manufacturing • Performance monitoring
Enrichment	<p>Add rich content to visualizations to enable consumption in scenarios such as :</p> <ul style="list-style-type: none"> • Work instructions for manufacturing or maintenance • Marketing materials • Configurators for Build to Order • Service manuals

4.11 Cross-Product Features

Some cross-product features are relevant for several SaaS applications. These cross-product features include the following:



Feature	Description
Product Cockpit	<div> Note These features are only available to customers who subscribed to this SaaS application before February 5, 2024. For more information, contact your SAP Account Executive.</div> Get an overview of product development information. This information includes requirements, product feedback, test cases, 3D models, and data from other systems.
Common Functions	Make central configuration settings, related to the following: <ul style="list-style-type: none">• Management of teams• User setup based on default role collections
Status Management	Set the current processing status of objects to ensure that they are processed accordingly

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