

FAQ

Q. What is Software as a service (SaaS)?

A.

- The three critical components for a SaaS offering define how the software is licensed, deployed, and most importantly, architected. Different from other types of software, SaaS is only licensed as a subscription and only deployed in the cloud.
- SaaS has been around for nearly two decades, but over the past decade has grown to become a core technology for most enterprises.
 - For example, SaaS represents over 80 percent of customer relationship management (CRM), over 70 percent of human capital management (HCM), and nearly half of enterprise resource planning (ERP) software deployments by revenue.
 - For example, Deloitte's most recent global CIO survey, conducted in 2018, found that 71 percent of participating organizations were already using or planning to use SaaS solutions.

Q. What are the key benefits of SaaS solutions?

A.

- **Simpler user experience:** With a SaaS solution there is no software to install, manage, or upgrade. Users simply open a web browser, log in, and get to work.
- **Flexible collaboration:** With SaaS solutions teams can collaborate on projects, documents, and designs in real-time, changing the way organizations share knowledge and innovate.
- **Accelerated Innovation:** With a SaaS solution user have access to the most current version of the software. Enhancements are automatic and are frequently deployed so users have access to the most innovative functionality.
- **Availability and mobility:** With a SaaS solution, everything is in the cloud. Access your applications and data from anywhere and with any device. Your team can be local, distributed, and highly mobile all at the same time while continuing to execute tasks quickly and efficiently.
- **Lower total cost of ownership** With a SaaS solution businesses avoid the costly IT operations, infrastructure, and data centers currently required to support on-premises software or a private cloud deployment.
- **Secure and Scalable:** With a SaaS solution, scaling software capabilities to meet shifting business demand becomes nearly effortless and effectively limitless, and users can be confident that a highly certified and regularly audited expert cybersecurity organization is ensuring the confidentiality, integrity, and availability of their data.

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| <p>Q.</p> | <p>What makes PTC's SaaS offerings unique?</p> |
| <p>A.</p> | <ul style="list-style-type: none"> • All PTC software is sold on a subscription basis and most PTC offerings are available in the cloud, including Vuforia, ThingWorx, and Windchill, which was the industry's first web-based PLM solution. • Within PTC's SaaS portfolio, however, is Onshape – a highly differentiated product development solution that enables companies to dramatically transform their product development processes. Unlike other cloud-based solutions, Onshape enables multi-party, multi-device, real-time collaboration by eradicating the very notion of design files – just as Google docs eradicates the notion of word files. Onshape enables users to build product designs that are created and stored in non-relational databases. This eliminates the complexity of version control across distributed design teams and enhances security by eliminating the use of USBs and other tools to exchange files between collaborators. |
| <p>Q.</p> | <p>What is PTC Atlas?</p> |
| <p>A.</p> | <ul style="list-style-type: none"> • PTC Atlas delivers a powerful set of core services that can be used to power many SaaS applications. These core platform services include user provisioning, data management, data translation, cloud deployment and management tools, analytics services, and many other core elements of modern powerful SaaS applications. We built PTC Atlas to support many applications, and indeed we already have dozens of third-party and even customer applications using our platform today. • The PTC Atlas platform will deliver a unified user interface from which PTC users can access all SaaS offerings that they subscribe to, and we will use the core platform services to improve all PTC offerings over time. |
| <p>Q.</p> | <p>How will Creo, Windchill, Vuforia, and ThingWorx benefit from PTC's SaaS strategy and PTC Atlas?</p> |
| <p>A.</p> | <ul style="list-style-type: none"> • Over time, PTC will add some of the benefits of SaaS via the PTC Atlas platform to Creo, Windchill, Vuforia, and ThingWorx, in addition to developing new applications on PTC Atlas. • Vuforia Expert Capture and Vuforia Chalk are two examples of SaaS augmented reality solutions that are already leveraging the core services of the PTC Atlas platform. |

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| <p>Q.</p> | <p>Will PTC continue to support and enhance Creo and Windchill?</p> |
| <p>A.</p> | <ul style="list-style-type: none"> • Yes. PTC will continue to support and enhance Creo and Windchill and other PTC offerings while also delivering new SaaS tools. • Creo 7, released in April of 2020, is one of PTC’s most ambitious and innovative releases ever. Creo 7 is full of amazing new capabilities from Generative Design, Multibody Design, Realtime Simulation including CFD using Ansys technology, Additive Manufacturing, CAM, and hundreds of enhancements to core functionality throughout. • -Windchill 12.0, released in June of 2020, closes the loop between engineering, manufacturing, supply chain, and field service. Highlighted among the many new updates is the new proof of traceability feature, powerful new BOM transformation tools, integration/API enhancements based on the ODATA standard, and a rapid application development environment. • ThingWorx 9.0, also released in June of 2020, is the industry’s most complete IIoT platform. The newest release is loaded with a full range of new and updated features and functionality including an upgraded platform to enhance availability, scalability and operability; new modeling and analytics capabilities; and a streamlined end-to-end operator experience. |

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| <p>Q.</p> | <p>Why Does PTC have multiple product development solutions?</p> |
| <p>A.</p> | <ul style="list-style-type: none"> • Creo, Onshape, and Windchill all provide unique product development capabilities for our customers based on their unique deployment and architecture needs. Every organization and project is unique, and these different priorities and needs require specialized solutions. • For example, the COVID-19 has encouraged companies to evaluate new technologies to cope with challenges of remote work and impromptu collaboration, which has accelerated interest in SaaS-based solutions like Onshape for some projects. • Only PTC delivers products optimized for all the ways we work with a portfolio that spans on-premises, Hybrid, and SaaS. |

Q.

Why is the adoption of SaaS solutions accelerating among product development organizations?

A.

- SaaS adoption is accelerating due to the convergence of three trends: Increased external pressure, improved market perception, and the emergence of competitive products.
 - **Increased external pressure:** A recent PTC survey of 150 directors, VPs, and executives who lead the engineering design, manufacturing design, and product lifecycle management functions for their companies revealed that 35 percent of respondents are more interested in SaaS-enabled CAD and PLM solutions as a result of the COVID-19 disruption.
 - **Improved market perception:** In the same survey 90 percent of respondents indicated that they had a positive or neutral view of SaaS. Furthermore, SaaS solutions were perceived as more capable to deliver on 16 of the 18 business drivers identified in the survey covering areas such as cost of ownership, collaboration capabilities, and ease of management.
 - **Emergence of competitive products:** Onshape, a PTC Business, is the first and only SaaS product development solution in the market. The company was founded by CAD legends, including Jon Hirschtick, John McEleney, and Dave Corcoran, all inventors of and former executives at SolidWorks. Learn more about Onshape [here](#).

Q.

Will PTC Cloud and the PTC Atlas platform run on Microsoft Azure or Amazon AWS?

A.

- PTC supports both Azure and AWS to give our customers the choices they need. However, Microsoft is our strategic and preferred cloud provider, and we continue to align much of the current and future PTC technology portfolio with Azure. For example, our robust integrations between ThingWorx and Azure IoT Hub.
- The PTC Atlas platform will run on Azure, which reinforces the strategic partnership with Microsoft. For example, Onshape wasn't built for any particular cloud provider but has primarily been run on AWS, and now we are also rolling out functionality for Onshape on Azure. Vuforia Expert Capture already runs on Azure.
- The Windchill SaaS strategy is no different. We are supporting both Azure and AWS, but our strategic investment will continue to enhance the integrations with Azure to accelerate product development and innovation with out-of-the-box PLM functionality on Azure.