

Achieving continuous value from software investments

MAINTENANCE SUPPORT AS A STRATEGIC INITIATIVE

Introduction

All software needs to be supported. Software is implemented to achieve both short term and long term benefit. While there is immediate value from specific software features and process improvements, value cannot be sustained over time, or in fact increased, unless plans are in place to ensure certain risks are avoided and improvements implemented. Like other assets, time and technology advancements cause breakdowns, incompatibility and, in the case of software, security vulnerabilities. However, software is unique because there is an opportunity to leverage continuous improvements that strengthen the initial investment.

Fully capitalizing on the unique nature of software does not happen by accident. Maximizing productivity gains, reducing downtime and driving innovation should be well planned activities within a strategic initiative. The best way to increase value from software is to do so throughout its entire lifecycle.

While driving value is often focused on the usage of the software itself, it is equally important to recognize that corresponding technology also changes, providing both opportunities and risks to the original software investment. Managing updates and upgrades that affect integrated applications, security, hardware, operating systems, peripherals and associated technologies, is vital to keeping the entire technology environment compatible with each other—and vital for maintaining a competitive edge.

IT activities
Update: Perform routine or project-based enhancements with no data migration required.
Migration: Move data from one source or multiple sources to a new target system
Upgrade: Implement new application on top of existing data and processes.

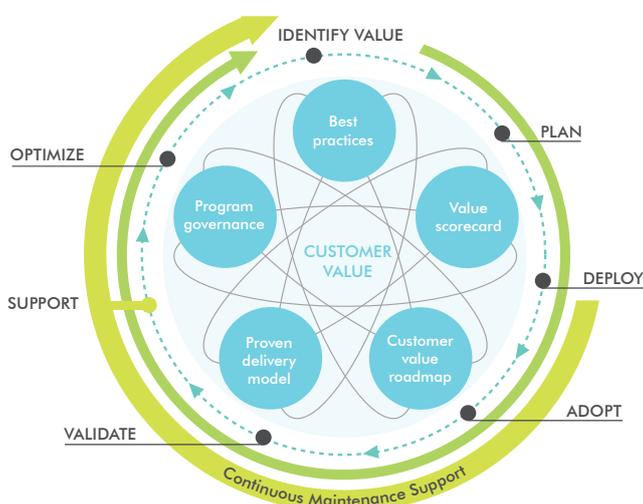
What is your plan?
• ... to ensure compatibility when updating operating systems or database applications?
• ... to fend off the kind of cyber threats that were launched 9,000 times last year?
• ... to keep your company ahead of the competition that is adopting the latest software technology?
• ... to leverage the expertise of your software vendor so administrators and users don't waste time trying to solve issues on their own?

Software technology is never stagnant. Organizations will either benefit from changes or be hindered by lagging behind. In the end, software technology cannot be ignored. It must be maintained and enhanced. By creating a strategic plan to leverage the support entitlements available, additional value can be achieved to both the top line and bottom line. A maintenance support strategy is the key to achieving continuous value.

Software deployment is only the beginning

Significant time and resources are invested in selecting a software vendor. Once selected, more investment is made in planning for the implementation and deployment. Ultimately, the goal is to achieve the intended value for which the software was purchased. The best way to realize continuous value is to take advantage of the enhancements built into the software's lifecycle.

Leveraging software maintenance support entitlements is critical to achieving value through product updates that provide productivity gains and improve innovation.



What is your company's software support strategy?

Building a detailed plan of how to leverage all of the help and productivity gains delivered through a Maintenance Support program is a key to growing the ROI from the initial software investment.

While most vendors provide significant support in the planning and deployment phases, it's the period of time after deployment that customers hope to achieve the intended benefits from the software. In fact, in that "run" phase, taking advantage of the maintenance support entitlements not only protects the initial software investment but helps drive even greater productivity and efficiency.

Continuous productivity improvement can only be achieved by adopting a strategic view of maintenance support. A strategic plan includes taking advantage of the software vendor's enhancements to existing technology, adopting brand new technology, utilizing pro-active tools that improve both the software and support experience and accessing expert technical help.

There are best practices for building a strategy that can transform software support from a reactive, tactical activity to a pro-active, strategic initiative. The points below are a guide to developing that initiative.

1 Create and adopt a maintenance support strategy

Maintenance support agreements provide access to entitlements. Identifying these entitled services and tools is vital to planning a strategy. Understanding the power of the entitled services is also critical. Software vendors provide tools and experts to help in this planning process. For example, PTC customers can view an online Software Maintenance Resource Training tool (The SMaRT Tool), contact Technical Support or work with their maintenance representative or reseller. These resources provide visibility to the catalogue of support services available and provide guidance on how to leverage each.

"ServiceXRG believes that companies will be most successful deriving continuous value from their software investment by developing a comprehensive support strategy. To do this they need to understand the support entitlements available from the vendor and make a concerted effort to take advantage of those entitlements."

—Tom Sweeny, Principal, Service Excellence Research Group
Services and Support Industry Research and Analysis

To gain that insight and maximize the value of the entitlements, customers should assign personnel to learn how best to utilize them and design a plan and schedule to take advantage of their benefits. The goal of this strategy, as described below, is to increase productivity, drive innovation, decrease resolution time and ensure software upgrade projects are well planned and executed in a timely fashion.

It must also be recognized that the complexities of technology require diligence to ensure the improvements provided by the software vendor are implemented by taking into account the compatibility requirements between the vendor’s application and the entire technology infrastructure in which it operates. This includes other applications from the same vendor, integrated or associated applications from other vendors, such as CRM or ERP, various databases, operating systems, hardware, and security layers.

2 Manage software assets

As technology from each vendor naturally advances, it’s imperative to adopt more modern technology or face the threat of being left behind. Laggards will find more difficulty collaborating with customers and partners because technology changes effect business processes, file types, communication protocols, and networks.

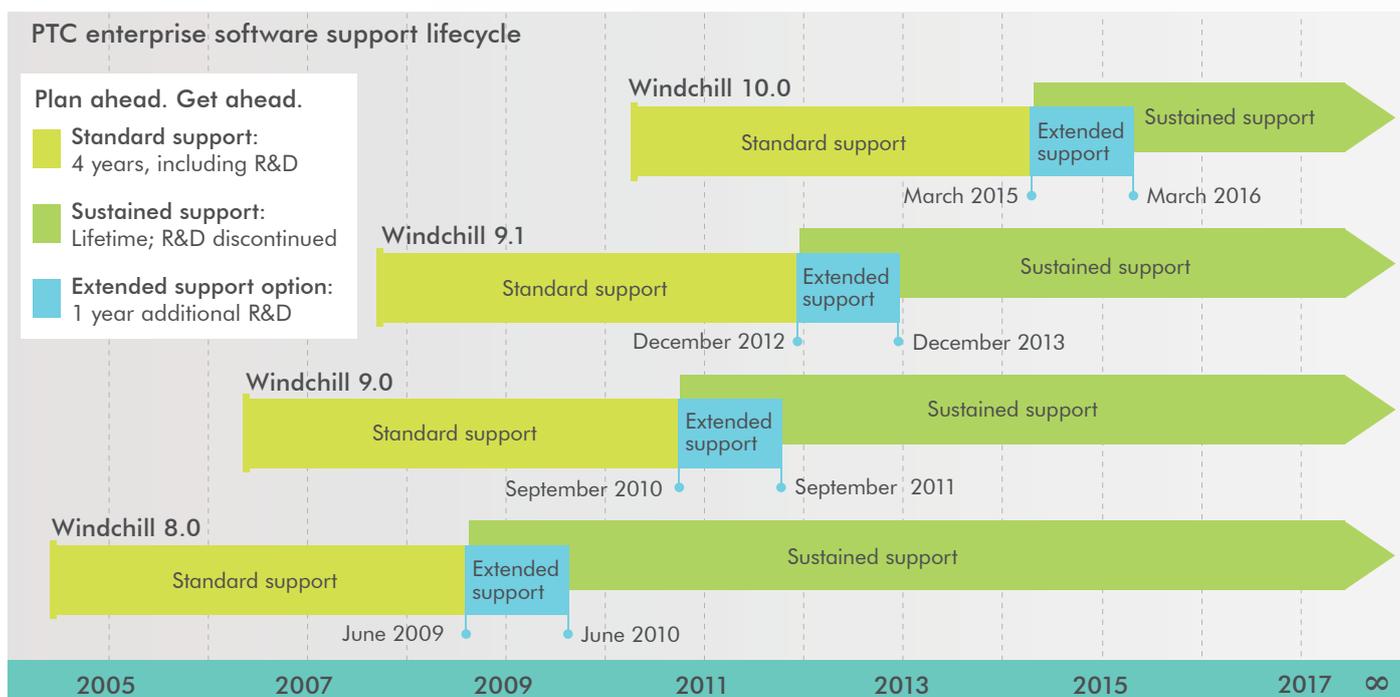
In 2010, PTC delivered 140 Maintenance Releases “Frequent Maintenance releases ensure that I’m always using the most up-to-date, enhanced features and experiencing full compatibility for all my PTC software products.”

–Robert Towler-Peel, Sr. Mechanical Engineer, Raytheon

A strong asset management plan should include visibility to where software assets are installed, which versions are in production, which individuals are using them, the maintenance status of each license and which licenses require necessary updates, upgrades and migrations. Planning will allow proper budgeting, reduced down time (related to aging infrastructure or compatibility issues), increased productivity and reduced security threats.

Plan updates ahead of gaps

Software vendors often create a calendar to display the expected development plan for a software version. That plan includes when a new version will be released, how long R&D will provide enhancements to that version and when that version will enter into a phase where R&D will no longer provide new maintenance releases. In some cases, there are “update” versions rather than “upgrade” versions, which reduce project complexity, time and effort. Visibility to this calendar is critical for planning risk mitigation associated with leaving obsolescent technology in production.



For more specific details, please visit the PTC Product Release Calendar: http://www.ptc.com/cs/product_calendar/PTC_Product_Calendar.htm

A proper plan will help forecast the expected costs and benefits of upgrading. A “don’t fix it if it isn’t broken” strategy will not yield the continuous value a business expects from its software investment. Waiting too long exacerbates ineffective business processes, reduces competitive advantage and leads to increased support costs or forced upgrades when vendor maintenance releases are no longer available. Waiting may prove to be more difficult, costly and risky than a well planned adoption of more current technology.

Reduce security risks

Staying current with technology not only effects the product development process but is critical for combating security threats.

According to a report by Bill Benner for Chief Security Office Magazine, a recent study of cyber crime indicates that the “average response costs for companies that were impacted were \$3.8 million per year. The cost of technologies and processes that could have effectively mitigated or prevented the same incidents was generally less than one-third the cost”.*

Protect your data

The data handled within product development systems is the most critical data your company owns. According to software security vendor Symantec, in 2010 the top two malicious cyber threats were to remove previously implemented security updates**. Security updates alone could be the most significant reason to keep your software current.

“Despite massive efforts of the security and software industry, vulnerabilities in software are persistent across all types of software and vendors. Thus, with the continued fixing of vulnerabilities of vendors’ software, patching has become a routine and necessity.”

–The Security Exposure of Software Portfolios,
Secunia Whitepaper, February, 2010

As technology, particularly enterprise-wide software, is exposed to the internet, databases that store critical product details are increasingly exposed to security threats. Vendors and customers need to work together to stay ahead of threats from the people trying to break into these systems. With each new software release, security improvements are included for related technologies such as operating systems, internet browsers and hardware. Some vendors provide separate security updates so they can be implemented with little or no effect on other aspects of the application.

For example, PTC product development hired a security expert who instituted a Windchill® Security Update Program to help combat these threats. This program includes, contracting a third party security company to perform cyber threat analytics, releasing scheduled, isolated security updates and integrating security updates directly into each subsequent maintenance release.

Malware is More Dangerous Than Ever

MORE PROLIFIC

75% Organizations hit by Web threat in 2010

WEB-BASED

92% Attacks come from the Web

ON LEGITIMATE WEB

84% Malware on legitimate Web sites

MORE DYNAMIC

54% Of attacks are dead in less that 24 hours

HIGHLY TARGETED

50% Companies that experience one or more targeted attacks

Sources: 2009 CSI Computer Crime and Security Survey, M86 labs, M86 web security survey, 2010



Reduce customizations

While software updates and upgrades help reduce security risks, they also provide a means to reduce customizations. With the development of each new release, software vendors often incorporate enhancement requests from customers. As the product matures, more customizations become standard functionality that the vendor can enhance and support. This reduces the internal cost of development and support for the customer.

If customers stay on highly customized versions, two problems occur: (1) vendors have difficulty providing technical support for changes the customer has made; (2) customers allocate scarce IT budget and resources to creating and supporting those customizations.

As part of a maintenance support strategy, a comparison should be conducted to assess customizations in the current deployed application vs. the enhanced features from the vendor. The savings from adopting the latest release can be significant depending on the type and quantity of standard features that can replace custom features.



Reduced Total Customizations by 65%

Pitney Bowes improved performance, leveraged Out-of-the-Box functionality, and improved vendor supportability by upgrading to Windchill PDMLink® from a heavily customized Windchill 6.2.6 instance.

According to PTC Senior Vice President, Windchill Product Development, Will Kohler, “PTC R&D invests hundreds of development hours learning exactly what our customers customize in their production applications. Over several years, those customers have adopted more current versions specifically to minimize their exposure to the risks associated with trying to maintain that customized version. Pitney Bowes is a great example of a company that recognized the inefficiencies they were experiencing by staying on a very old version of PDMLink. By reducing customizations 65%, they are in a much better position to achieve their product development process goals with the technical support and development support of PTC.”

3 Capitalize on technology improvements

User-built features that become standard in subsequent releases from the vendor are one example of the benefits from capitalizing on technology improvements. To increase the benefits of the initial software investment, it is critical to take advantage of all of the productivity enhancements delivered through the ongoing maintenance releases and new version releases.

“...changing Windchill’s source code...result(s) in better system performance as well as increased user productivity.”

–CIMData Commentary, “Windchill’s Evolving Lineage”, 2010

Maximize user productivity

Adopting releases throughout the product lifecycle is an important strategic advantage. Vendors provide fixes and enhancements regularly. These improvements help customers reduce down time and increase productivity. Without these improvements, there is a risk of falling behind competitors who become more efficient and more innovative using new technology.

In order to adopt the latest releases, preparations should be made well ahead of the intended deployment. Someone should be assigned the task of evaluating the scheduled maintenance releases and new version releases. Software vendors document the fixes and enhancements to assist in evaluating the release benefits. Once evaluated, a planned activity to update the application and train the users, if necessary, should follow. This is critical to staying ahead of the competition and driving value to both the top line and bottom line of the company.

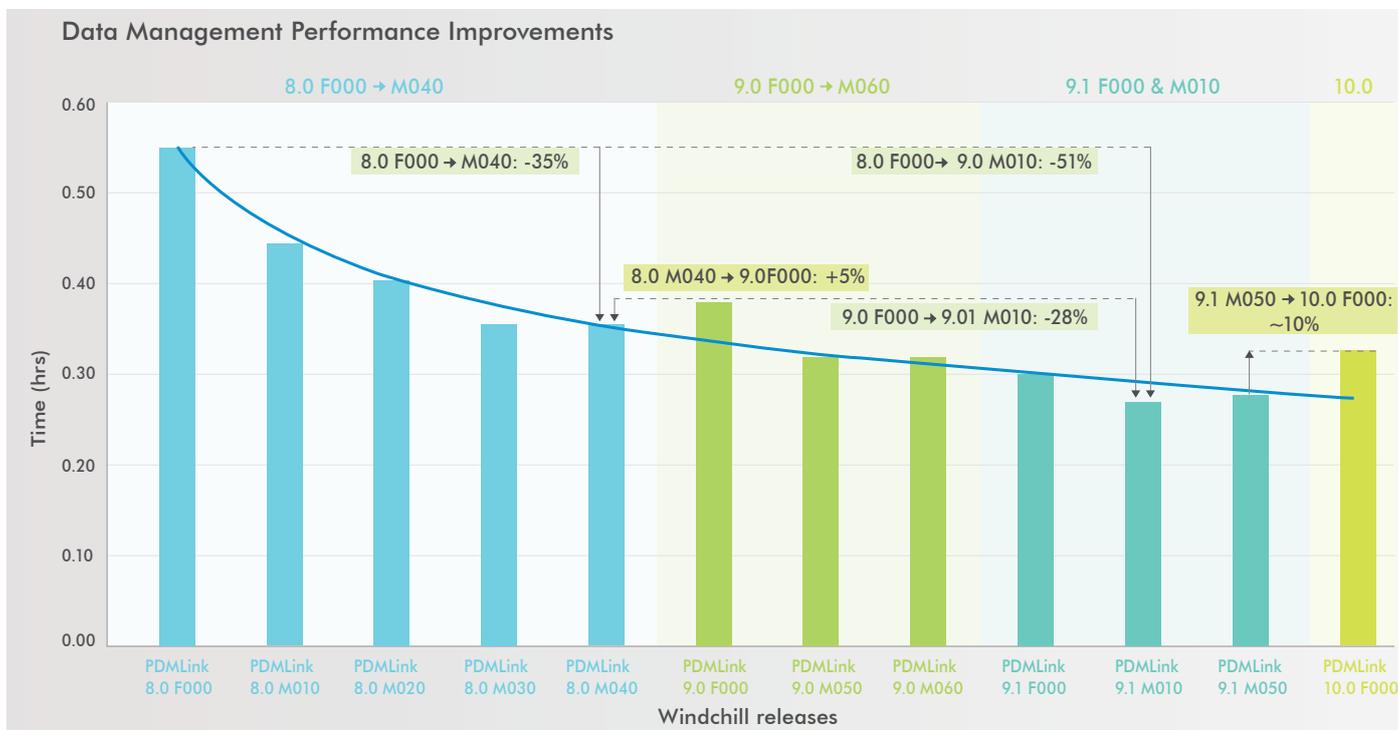


Figure 1: Version-to-version hours reduced based on LAN performance for Pro/ENGINEER® and Creo™ Elements/Pro™ data management tasks

Improve supportability

Software vendors also develop new versions to help customers more easily maintain the software. As software ages it becomes more expensive and more difficult to support. “Supportability” is related to both the underlying source code and the connection to the vendor’s technical support group. As the code itself is simplified over time, customers will experience faster and less complex updates as they install maintenance releases. The connection to technical support provides faster and better diagnosis of issues as the software itself can alert administrators to potential performance issues or other conflicts. In some cases, software vendors can connect directly to the customer’s servers and applications to address those alerts and help further diagnose the issues.

In PTC’s most recent PLM release, Windchill 10.0, supportability is a key component of the enhanced product. One new feature is a “System Configuration Collector” used to collect information about software performance issues and better enable self-diagnosis. The collected data can also be shared with Technical Support to streamline the diagnosis and issue resolution time by reducing the number of interactions typically required for Technical Support to gather the necessary data. This one tool helps decrease the customer’s time involved in issue resolution and increases the productivity of all of the users.

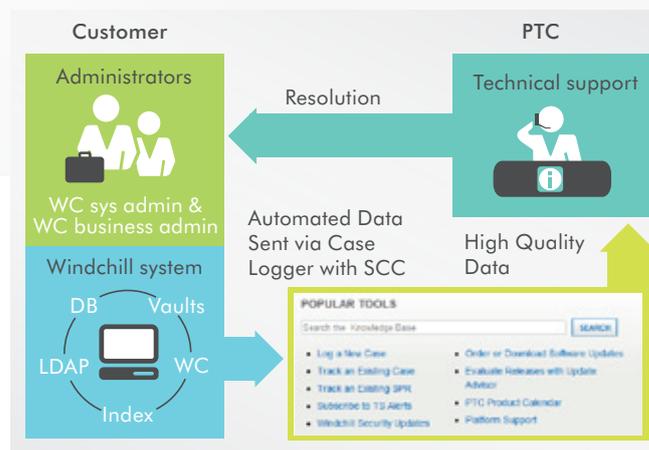


Figure 2: Sending System Configuration Data through the Case Logger Tool is Automated with the System Configuration Collector

4 Optimize software utilization

Many software users can begin working with an application quickly with varying degrees of training. Software vendors often provide formal training as well as technical help as part of the maintenance support entitlement.

Improving the user experience

A plan to leverage available help will ensure users are continuously exploring and learning new methods to complete their product development projects more efficiently, more creatively and more accurately. Technical Support experts can guide users through step-by-step instructions. Self-help “tips and tricks” allow users to learn basic or more advanced techniques at their own pace.

In 2010, nearly 6,000 people attended PTC’s ‘Live’ and recorded Tech Tips webcasts.

PTC even incorporates Technical Support help directly within the product with access to contextually relevant support documents including suggested techniques. When users are searching for help with a specific feature or technique, they can easily find resources to ensure they can complete their task, improve their skills and increase their expertise using the software. With each new release, PTC adds more support resources within the products.

The practice of continuous user improvement means the value of the original software investment improves. Users become more confident, perform tasks faster and utilize features that lead to product innovations. In addition, when updates are made, users who take advantage of the vendor’s help will be able to implement the enhancements from maintenance releases and new version releases faster.

5 Create a strategic partnership with software vendor

While there are many software users and administrators with sophisticated expertise, the software vendor often has infrastructure, personnel and vendor-specific insight that is unique. A strategic maintenance support plan should include leveraging the vendor’s expertise to increase efficiency and accuracy during upgrade planning, issue resolutions and project fulfillment.

The vendor’s technical support personnel have experience with other customers and a direct connection to R&D that cannot be duplicated outside the vendor’s infrastructure. The experience from evaluating and planning updates and migrations, answering software usage questions, analyzing enterprise software performance and resolving related technology compatibility issues is unique to the vendor. Leveraging that experience is important to most companies, but is paramount for large companies with thousands of users, multiple applications from the same vendors and multiple product development projects underway simultaneously, perhaps across the globe.

PTC offers its largest enterprise companies specific services to address their unique needs. With potentially hundreds of users accessing help, enterprise customers form a relationship with PTC to assist in prioritizing open cases, diagnose complex interoperability issues and provide guidance when planning updates, upgrades and migrations. The services provided include an assigned senior technical support account manager, access to a specially-staffed support desk and weekend support to ensure projects can be tested and deployed without interrupting production time.

PTC Global Maintenance Support Entitlements to sustain and grow software ROI

PTC provides maintenance support services designed to help customers drive value continuously over the lifetime of the applications. In fact, PTC provides an integrated system of support that addresses the key points described throughout this paper. This support system is comprehensive, but, like software, is continually enhanced.

PTC consistently evaluates feedback from customers, assesses industry-wide support “best practices” and makes design enhancements to improve the user’s experience and drive efficiency. Customers who understand how to leverage the Maintenance entitlements will gain the benefits provided by a well coordinated system of support. When evaluated on a financial basis, the value of these benefits can easily outperform the annual maintenance investment.

At PTC, every effort is made to ensure each component of the entitlements is linked to other components. For example, Maintenance customers can:

- Use online tools to evaluate new software releases and download the appropriate version
- Attend a “Tech Tips” session to learn basic usage of the new software
- Log a case with Technical Support requesting help to determine the best method using a specific feature
- Search the Knowledge Database to find additional help using the application from within the product itself

Each of those elements are linked together by well organized, well trained PTC personnel who are dedicated to making PTC software easy-to-use, manage and update.

Below is a description of the key entitlements that should be leveraged as part of a strategic support plan to drive continuous value from an investment in PTC software.

Gold Maintenance Support

Team	Feature	Description	Value
Call Centers – Telephone Support Team	24 Hour Technical Support*	Support Engineers will answer software usage questions and technical issues.	Resolve issues timely and rely on product experts to guide you through techniques and software features that will allow for greater product innovation and customer responsiveness.
	Remote Desktop Diagnostics	Support Engineers work within your exact environment.	Remote access leads to faster resolutions and an opportunity to learn best practices directly from PTC experts.
	ISO-Certified Support Call Centers	Consistent support managed and audited to continuously improve your experience.	Your team knows what to expect every time they contact support, so they can spend more time innovating your products
	Multi-Language Live Support	Global support call centers staffed with multiple language support engineers.	Whether you have individual users around the globe or a globalization strategy, PTC offers the same ISO-Certified support in multiple languages to fit your global needs.
	Formal Prioritization and Escalation Procedures	Prioritization helps communicate your urgency. Escalation means PTC will assign a manager to your case.	By providing you with the ability to determine your case's priority, PTC can better meet your expectations and time constraints. And, if the case is not resolved in a manner you're satisfied with, we encourage escalation to ensure your needs are met timely and accurately.
	Direct Access to R&D	Support Engineers work directly with R&D.	You get reliable answers from the software vendor in a coordinated manner to reduce your time-to-resolution.
	One Global Support Database	Every internal and customer-facing document can be accessed by every Support Engineer.	Whether you're a multi-national, medium sized or a small business, you benefit from resolutions and best practices from our customer base and Support Engineer experts.
	Premium Support Desk	Support engineers trained and certified to work with Enterprise customers.	You interact with a smaller circle of senior support engineers who are familiar with your business and your priorities.
Technical Support Account Manager (TSAM)	Your personal support advocate, helping you manage your priorities and leverage the entire Maintenance Support System.	Provides validated ROI and increased customer satisfaction. TSAMs are familiar with the personnel, processes, and systems of Technical Support and R&D to help resolve cases. The TSAM is your administrator's single point of contact resulting in more effective resolutions.	

Team	Feature	Description	Value
Call Centers – Telephone Support Team	Planned Weekend Support	Reserve a support engineer to be available for a planned weekend event such as data migration, upgrade, or other activities.	Provides a higher level of security when performing a system upgrade, data migration, or other activity. By planning these events for the weekend you can reduce the impact on productivity for your end users.
	Onsite Technical Support	Onsite technical support from a senior support engineer to help resolve technical issues.	Onsite support for your most critical support needs, and an opportunity to learn troubleshooting from PTC experts. Fast response to enterprise down scenarios and go-live support.

The Tools	Feature	Description	Value
Online Self-service Support Tools	Knowledge Base	A comprehensive library of 55,000+ technical documents, with a powerful search engine.	Find answers to your questions quickly and easily without logging a call. Take advantage of resolutions and best practices that already exist from around the world.
	Customer Configuration Profile	Provide PTC with up-to-date information detailing applications in use, OS and hardware platform.	With each case you submit, PTC will already know your environment leading to faster diagnosis and resolution.
	License Management Tools	Manage your PTC licenses, site information and configurations online.	Less time managing your licenses means more time working on your projects.
	Software Update Advisor	Compare specific release information to determine the best update for your software.	By planning ahead on your next software update or adoption, you can avoid known issues and benefit from new resolutions and improvements.
	Business Asset Summary Tool	Easily view and manage your PTC information such as software licenses, software orders, and service contracts.	The ability to easily review and track your software information gives you the control you need to effectively plan your budget, implementation and software needs.
	Support Email Alerts	You select frequency and content for automated notifications about new solutions, software updates, changes in case status and more.	Pro-active, personalized email alerts provide time-sensitive, relevant information. Avoid downtime and take advantage of the latest techniques and software improvements as soon as they are available.

The Tools	Feature	Description	Benefit
Online Self-service Support Tools	Learning Connector	Integrated tool for the Creo/Elements Pro and Windchill Help Centers providing contextually relevant Technical Support and eLearning content.	The Learning Connector makes it easier to leverage Technical Support documentation and eLearning content related to your current work, promoting innovation and uptime.
	Live and Recorded Tech Tips Sessions	Learn best practices and short cuts from PTC experts with the opportunity to ask questions during webcasts.	Technical experts offer valuable tips to help boost your skill, speed and overall performance. Improve your design capabilities and reduce the time needed to complete projects.
	The Maintenance Minute	An exclusive email alert to keep your users up-to-date.	These pro-active alerts enable you to stay ahead of issues and take advantage of newest releases and resolutions as soon as they are available.
	The SMaRT Tool	An interactive web-tool designed to help you understand the valuable pro-active features of the Maintenance Support.	Learn about your exclusive entitlements and how to access them. Apply these capabilities to your everyday business environment to maximize your software and maintenance investments and improve your overall software experience.
	Quarterly Technical Support Webcasts	Workshops for administrators and advanced users focused on pro-active management and use of software.	Your admin receives pro-active advice on how to use the latest and best performance monitoring tools, troubleshooting, issue avoidance, and applying latest technology fixes.

The Technology	Feature	Description	Benefit
Investment Protection, and Continuous Enhancement	Quality Software Development	Investments in software development standards result in high quality releases for PTC products.	Confidence in the latest releases means you can leverage the most advanced technology to help you improve your designs and reduce the time needed to complete your projects.
	Kernel Owned by PTC	PTC develops and owns the Kernel that is the centerpiece of our software development.	Development quality and timeliness of fixes are much easier to control when a software developer owns the kernel. PTC customers should feel confident about adopting the next release or improving uptime through increased software quality and performance.

The Technology	Feature	Description	Benefit
Investment Protection, and Continuous Enhancement	Maintenance Releases	A continuous stream of software enhancements and fixes in between major releases.	Improve uptime with software issue resolutions and expand capabilities by taking advantage of new integrations within PTC's product families and new or enhanced compatibility with the latest hardware, operating systems and other software applications.
	Automatic Notification of New Releases	Email alerts keep you informed prior to a release and at the time the release is available.	Developing innovative products means you need a competitive edge. Gain that edge by using the latest software enhancements as soon as possible.
	Integrated Products	PTC is committed to developing products that are integrated and interoperable.	Eliminating the need for gateway products reduces potential obstacles to completing your design and meeting your deadlines.
	New Software Releases	You are entitled to the next version of the software previously purchased.	Staying current on the latest release is the primary strategy for achieving growth and profitability from your software investment. Increased productivity, added uptime, new features and functionality are all at the heart of driving more value from your product development process.
	Gold Loyalty Discount Program	Special discounts from PTC software and hardware partners.	You have exclusive access to a select group of relevant software and hardware vendors. PTC has created these relationships to help customers save money every day.
	Software Package Upgrade Discounts	You will receive software discounts if you choose to move up to a higher end package.	When a customer needs more capabilities in their product design, adding software functionality can be a key to meeting your product development initiatives. An established package discount provides cost savings for being an active Maintenance Support customer.
	Extended Support	Extends R&D support by providing SPR access for one year after software development is discontinued.	An optional service for Gold customers, included as part of your Platinum Support Entitlement. You can plan the upgrades of new releases for the cycle time you need. Get support for your release for as long as you stay active on Platinum maintenance.

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