PTC®

PTC Global Software Development Solution

The PTC Global Software Development solution offers a single, unified platform for software requirements and validation; process and workflow; change, configuration and release management; and risk and compliance management. Powered by the PTC Integrity™ product family and offered as a convenient subscription, the solution improves compliance and quality, while reducing costs and time-to-market.

Gain Unprecedented Visibility, Control and Flexibility Across the Software Development Lifecycle

Explosive demand for connected products and systems, challenges manufacturers to quickly develop high quality software faster and with less risk. Software is vital for differentiation and profitability. Yet constant change, strict compliance standards, as well as the growth of globally distributed teams and product variants all make development more complex.

To overcome these challenges, organizations rely on the PTC Global Software Development solution for exceptional visibility and control over product and software engineering processes.
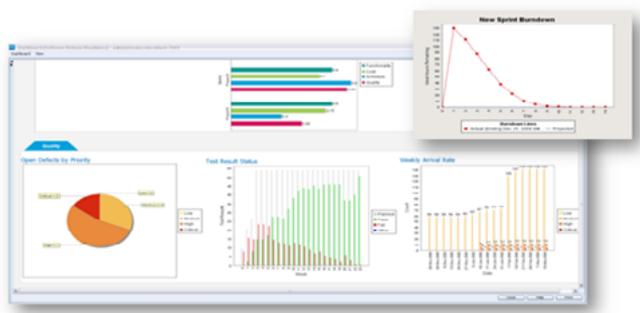

Figure 1: Get real-time insight into release readiness and other key project indicators.

The PTC Global Software Development Advantage

The PTC Global Software Development solution offers a unified lifecycle development platform that can be configured to automate any development workflow or process. It supports all activities and assets associated with application and product engineering to drive innovation and meet your quality, cost and compliance goals by:

- **Managing people, processes and artifacts** across the lifecycle

- **Improving compliance** and quality with end-to-end visibility and traceability

- **Adapting processes** with agile, traditional and hybrid process support

- **Giving insight** into software metrics based on actual, not estimated, work activities

- **Protecting strategic software assets** with comprehensive change control, and configuration and release management for all assets—not just source code

- **Optimizing reuse** across and within product lines

Other Highlights		
Rapid configurability	Use templates for traditional and agile methodologies out-of-the box or configured your way.	Reduce time-to-value and total cost of ownership.
Streamlined compliance	Gain end-to-end visibility on a secure, tamper-resistant platform including auditable processes and 21-CFR-compliant e-signature support.	Improve compliance management; streamline reporting for functional safety, quality and industry standards.
Seamless process and event-driven, server-to-server integrations	Expose data through standards-based interfaces, Java™, SOAP and RESTful web services; integrate popular tools and tailored integration toolsets, rich APIs, and data in PTC® Windchill® and PTC Integrity™ Modeler™.	Achieve full, lifecycle data access and transparency; leverage technology value chain.
Exceptional enterprise scalability, reliability and data integrity	Manage one system; control unified data model.	Easily scale from 10 to 10,000 users, eliminate data redundancy; enhance stability and security.
Convenient software and service subscription	Finance software and support together with streamlined, transparent payment model.	Reduce upfront software costs and wasteful licenses; align budget to immediate benefits.

How It Works: The PTC Global Software Development Solution

The PTC Global Software Development solution is designed to work with an enterprise-class Oracle® or Microsoft® SQL Server® database repository. It provides access–through a native client, Web, command line or rich Java, C or Web Services API–to capabilities that enable the definition, orchestration and management of assets and processes spanning the entire development lifecycle.
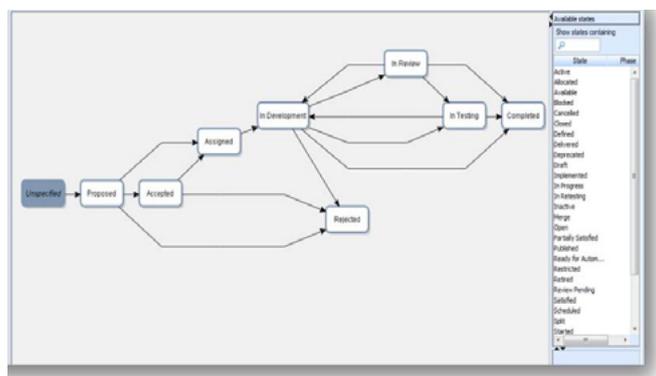

Figure 2: Tailor your development process to meet specific team and organizational needs.

- **Items**
  Items form the basic building blocks—representing requirements, enhancement requests, user stories, test cases, defects and change requests.

- **Workflow and Process Automation**
  Every item type is connected to an enforceable workflow that describes state-to-state movements with definable rules, full audit trails and security. Escalations, conditional assignments, notifications and external processes are defined and initiated through process automation.

- **Relationships**
  Definable, named relationships between items establish hierarchies and traceability. Items can have an unlimited number of relationships with standard relationships defined in solution templates.

- **Configuration Management**
  Every artifact—not just source code—can be versioned, branched, merged, and base lined as part of a configuration to drive reuse-by-reference at multiple levels of abstraction across the lifecycle and products or projects.

- **Change Management**
  Full change management—including change requests, change orders and change packages—can be applied to any artifact to extend control, mitigate risk and streamline compliance with CMMI and Automotive SPICE standards, and functional safety frameworks including IEC 61508 or ISO 26262.

- **Requirements & Test Management**
  Comprehensive requirements management combined with end-to-end requirements/test artifact traceability simplify capturing, managing, validating and verifying product and product-line requirements across the lifecycle.

- **Customizable User Experience**
  Configurable views are available to all user types for authoring in the appropriate context. These include document views, list views, tree views, detail views and integrations with Microsoft® Word, Microsoft® Excel® and Microsoft® Project, and IDEs including Eclipse™ and Microsoft® Visual Studio®.

- **Security & Permissions**
  Centrally-administered, enterprise-class security and audit capabilities include domain-based authentication, item-level access per- missions, attribute control, e-signatures, state-based approvals and full audit reporting.

- **Reporting & Metrics**
  Real-time data populates dashboards, charts and reports with full drill-down features to enable management-by-exception, identify causes, measure efficiency, and improve status reporting across project assets and activities.

World-Class Functionality Throughout the Lifecycle

The PTC Global Software Development solution can be deployed to address multiple domains traditionally met by standalone point tools. As the number of functional areas managed by the solution increases, so does the value to your organization. Standard functionality in the PTC Global Software Development solution includes:

- Change control
- Configuration management
- Requirements management
- Test & quality control management
- Source code management
- Build/release management
- Issue & defect management
- Process & workflow visibility and management
- Project management

Subscription information

For more on our subscription-based offerings, visit: PTC.com/subscription.

Platform Support and System Requirements

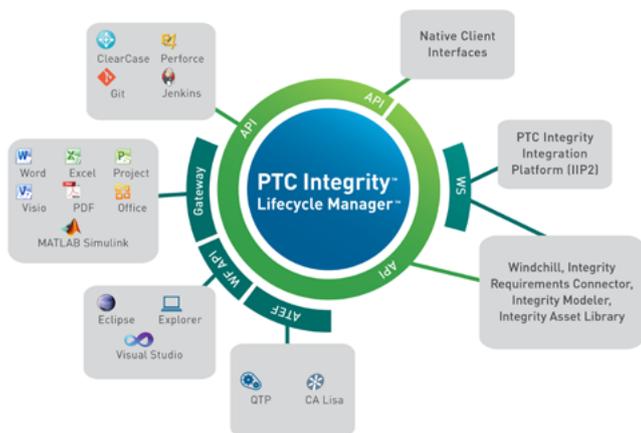Click here to view the platform support and system requirements documentation.

Figure 2: Designed for extensibility, the PTC Global Software Development solution serves as the hub of your software lifecycle.