

PTC Cloud Services Terms and Conditions

These Cloud Services Terms and Conditions (“Cloud Services Terms”) set forth the terms and conditions pursuant to which PTC provides Cloud Services to customers (each a “Customer”), as specified in a quote from PTC or a Reseller to Customer that references these Cloud Services Terms (the “Quote”). “Cloud Services” means the provision by PTC to the Customer of hosting services so that Customer may access the Hosted Software via the internet, along with certain IT administration and application administration support services, as specified below and in Exhibit B. One variant of “Cloud Services” is PTC’s “On Demand” services, as specified in the applicable Quote.

These Cloud Services Terms are also governed by the terms and conditions of the applicable PTC license agreement between PTC and the Customer for the Hosted Software (the “License Agreement”). These Cloud Services Terms shall prevail over any conflicting or inconsistent terms or conditions contained in the License Agreement.

1. Definitions. Capitalized terms referred to in these Cloud Services Terms, and not defined in the body of these Cloud Services Terms, shall have the meanings set forth in Exhibit A. Capitalized terms used and not otherwise defined herein shall have the respective meaning set forth in the License Agreement.

2. Cloud Services.

(a) Cloud Services. Subject to these Cloud Services Terms and the payment of the fees specified in the Quote, PTC shall, during the Service Term (i) maintain the Hosted Software and the Hosted Data on the Hosted System, (ii) allow Users to remotely access and interface with, via the Internet using supported and properly configured web browsers, an executing instance of the Hosted Software that is operating on and from the Hosted System, and (iii) allow Users to access and modify the Hosted Data, and store additional Hosted Data, through Customer’s use of the Hosted Software.

(b) Scope and Limitations. Use of the Cloud Services is limited to use by Users and is subject to any quantity, capacity, storage and/or other usage limitations based on the purchased licenses as set forth in the Quote and the License Agreement. Subject to Section 10(d) below, the Cloud Services only entitle Customer to have Users remotely access the Hosted Software specified in the Quote via the internet. Use of the Cloud Services is subject to the Acceptable Use Policy located at: http://www.ptc.com/support/customer_agreements/index.htm.

(c) Availability and Support SLAs. PTC will use commercially reasonable efforts to maintain the uptime availability and support response times for the Cloud Services as specified in Exhibit B. Exhibit B is comprised of two attachments: Exhibit B-1 for PTC’s PLM, SLM and Thingworx products, and Exhibit B-2 for PTC’s Axeda products. The applicable Exhibit shall be

determined by the type of Hosted Software to which the Cloud Services relate.

3. Fees, Billing and Payment. Customer shall pay PTC (directly or through a Reseller) or its designee the fees specified in a Quote. For Cloud Services fees to be paid by Customer directly to PTC or its designee, all fees are due net thirty (30) days from the date of invoice unless the Quote specifies otherwise. Fees do not include sales, use, value added or other excise tax. Customer shall pay or (if paid by PTC or Reseller) reimburse PTC and/or Reseller as the case may be for all such taxes based on these Cloud Services Terms or fees payable hereunder (but not any taxes based upon PTC’s gross revenues or net income), together with any interest on such taxes if not due to PTC or Reseller’s delay. Amounts not paid when due shall be subject to interest at one and one-half percent (1 1/2%) per month or, if less, the maximum rate of interest allowed by law, calculated from the due date. For each order that is placed through a Reseller, Customer shall be obligated to pay to the Reseller the applicable fees for the Cloud Services ordered, as agreed between the Reseller and Customer.

4. Users

(a) Users. For certain Cloud Services, Customer may be required to deliver to PTC the names of Customer’s Users. During the Service Term, certain Users (whom Customer has designated as having such authority) may, on behalf of Customer, request PTC to add or remove persons as Users. Customer is responsible for compliance with these Cloud Services Terms and the Acceptable Use Policy by all of its Users.

(b) Restrictions and Requirements for Users. Customer acknowledges that, when a User accesses the Hosted System for the first time, such User may be required to (A) read and affirmatively agree online to certain terms of use, which shall contain restrictions consistent with the terms of these Cloud Services Terms, and (B) provide certain personal information, which shall be used solely by the

Hosted System for purposes of identifying and verifying such User. Customer agrees to promptly suspend Authorized Passwords of any persons who (1) cease to qualify as Users, (2) Customer no longer wishes to have access to the Cloud Services, or (3) Customer knows or reasonably believes are causing Customer to breach these Cloud Services Terms or are in any way mishandling an Authorized Password. If PTC reasonably believes that a User is causing Customer to breach these Cloud Services Terms or is in any way mishandling an Authorized Password, then PTC may, at its sole discretion, suspend the use of such User's Authorized Password indefinitely, in addition to any other rights or remedies provided under these Cloud Services Terms and the Acceptable User Policy or under law.

5. Ownership and Confidentiality. Ownership of the Hosted Software and Cloud Services, any related documentation, copies, modifications and derivatives of the foregoing or documentation (in whole or in part), and all related copyright, patent, trade secret and other proprietary rights, are and will remain the exclusive property of PTC and/or its licensors. PTC reserves all rights not expressly granted to Customer in these Cloud Services Terms. There are no implied rights. Customer shall not use, disclose or provide any Hosted Software or related documentation (or any modifications or derivatives thereof) or any other confidential and/or non-public information related to PTC's products, services or business, to any other party, except as permitted under these Cloud Services Terms or the License Agreement for the Hosted Software.

6. Exclusions

(a) PTC will have no responsibility with regard to the quality or completeness of any Hosted Data.

(b) Customer shall be solely responsible, at its expense, for establishing, maintaining, and operating Customer's connection to the Hosted System via the internet (the speed of which may have a significant impact on the responsiveness of the Hosted Software), including all computer hardware and software, properly configured web browsers, modems and access lines.

(c) Unless otherwise specified in Exhibit B, Cloud Services are provided for only the then-current and the one (1) immediately prior release of the Hosted Software. Cloud Services do not include any implementation, integration, custom code development, training or consulting services. All such services are considered out of the scope of Cloud Services.

(d) During the Service Term, Customer's use of the Hosted Software shall be exclusively through the Cloud Services, and Customer shall not be authorized to use such Licenses on other computer systems (other than through the Cloud Services).

7. Hosted Data.

(a) PTC shall take commercially reasonable steps, or cause such commercially reasonable steps to be taken, designed to prevent security breaches. It is impossible to maintain flawless security, and PTC does not make any representation or warranty in this regard. Accordingly, Customer agrees that it will not include in the Hosted Data: (i) any information, or documents or technical data that are classified, ITAR controlled or otherwise have been determined by the United States Government or by a foreign government to require protection against unauthorized disclosure for reasons of national security, and/or (ii) any data that is "protected health information, including any medical, demographic, visual or descriptive information that can be used to identify a particular patient/individual" and/or any other data subject to the U.S. "Health Insurance Portability & Accountability Act of 1996" and regulations promulgated under that Act (collectively "HIPAA"). Except with respect to PTC's express obligations set forth in these Cloud Services Terms, Customer is solely responsible for any damage or losses caused by unauthorized destruction, loss, interception, or alteration of the Hosted Data by unauthorized persons.

(b) PTC shall treat all Hosted Data as confidential and shall only use the Hosted Data to (i) provide the Cloud Services (including reporting to Customer on their use of the Cloud Services), (ii) use aggregated and/or anonymized information to improve its services, develop new services, show trends about general use of services, and for statistical analysis and business measures, (iii) monitor Customer's use of the Cloud Services for security and technical support purposes and for validating Customer's compliance and usage limitations, and for purposes of otherwise complying with PTC's obligations to Customer, (iv) enforce these Cloud Services Terms, and (v) share with any PTC subcontractors who need to know such information in order to provide the Cloud Services, provided that they are bound by similar confidentiality obligations. For purposes of clarity, PTC's obligation to keep such Hosted Data confidential shall not apply to information that (1) PTC learns of from another source or independently develops without reference to the Hosted Data or (2) PTC is required to disclose by law (but only to the extent of such required disclosure).

(c) Customer acknowledges that the information Customer enters into the Hosted Software and Hosted System may be transferred outside the European Economic Area for the purposes of data processing by PTC, its subsidiaries, and its affiliated companies. With respect to the receipt and processing of personal data from individuals that originates in the European Union (EU) or Switzerland, PTC Inc. has certified to the Safe Harbor Framework between the United States and the European Union, and to the Safe Harbor Framework between the United States and

Switzerland. Accordingly, PTC Inc. adheres to the Safe Harbor Privacy Principles, as agreed separately by the U.S. Department of Commerce with the European Commission and the Federal Data Protection and Information Commissioner of Switzerland (the "Safe Harbor Principles"). By submitting personal information, Customer consents to the use of that information as set out in this subsection and represents to PTC that Customer has received express consent from the individual persons (including Customer's employees) whose data is being used/transferred prior to providing this personal data in the Hosted System. Where the personal information is that of a third party, Customer certifies that it has obtained that information pursuant to applicable data protection laws and has obtained all necessary authorizations and consents with respect to such information.

8. Use of the Internet. Customer acknowledges and agrees that the internet, and communications over it, may not be absolutely secure and that connecting to it provides the opportunity for unauthorized access to computer systems, networks, and all data stored therein. Data transmitted through the internet or stored on any equipment through which data is transmitted may not remain confidential and PTC does not make any representation or warranty regarding privacy, security, authenticity, or non-corruption or destruction of any such data. Use of the internet is at Customer's risk.

9. Developer or Non-Production Services. If a Cloud Service or Cloud Service environment is identified in a Quote as being "developer", "development", "sandbox", "demo", "evaluation" or similar non-production service or environment, then such Cloud Service or the applicable environment shall be used by Customer for non-production use only.

10. Term and Termination

(a) The initial term of the Cloud Services shall be as specified in the Quote. Thereafter, Cloud Services shall renew automatically in accordance with the auto-renewal terms set forth in the Quote, unless the Quote specifies different renewal terms.

(b) Either party may terminate the Cloud Services if the other party breaches the terms set forth herein or in the Quote or Acceptable Use Policy and fails to remedy such breach within thirty (30) days after written notice thereof from the non-breaching party; provided, however, that the cure period for non-payment of amounts owed shall be ten (10) days.

(c) Without limiting other remedies, PTC may immediately issue a warning or temporarily or indefinitely suspend Cloud Service if Customer and/or its Users breach these Cloud Services Terms or if Customer's actions may cause liability for PTC, its subcontractors or other subscribers to the Hosted System. The suspension of the

Cloud Services shall not cause the Service Term to be extended and PTC may, at a later time, elect instead to terminate these Cloud Services Terms in accordance with subsection 10(b) above if Customer remains in breach of these Cloud Services Terms or the Acceptable Use Policy.

(d) Customer may upon three (3) months' written notice terminate the Cloud Services and these Cloud Services Terms. Upon such termination, Customer may host the Hosted Software itself without penalty.

(e) On termination of the Cloud Services or expiration of the Cloud Services without renewal, Customer shall make no further use of the Cloud Services and shall immediately deliver to PTC or destroy the original and all copies of any documentation and any other PTC confidential information provided under these Cloud Services Terms and in its possession or control, and upon request, provide its notarized certificate to PTC that it has done so. Termination or expiration shall not affect any rights accrued prior thereto. Sections 3, 5, 10(e), 11(B), 11(C) and 12 shall survive termination or expiration of the Cloud Services.

11. Warranty/Disclaimer of Warranty/Limitations of Liability

(A) PTC warrants that PTC will perform the Cloud Services substantially in a good and workmanlike manner and in accordance with industry-standard practices.

(B) EXCEPT AS EXPLICITLY STATED HEREIN, PTC DISCLAIMS (AND CUSTOMER WAIVES) ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, INCLUDING ANY WARRANTY OF SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND/OR NON-INFRINGEMENT, AND/OR ANY WARRANTY THAT CUSTOMER WILL ACHIEVE ANY PARTICULAR RETURN ON INVESTMENT OR WARRANTY ARISING BY STATUTE OR FROM A COURSE OF DEALING OR USE OF TRADE, AND/OR ANY WARRANTY WITH RESPECT TO THE SECURITY OF THE CLOUD SERVICES OR THAT HOSTED DATA WILL NOT BE DESTROYED, LOST, INTERCEPTED, OR ALTERED BY UNAUTHORIZED PERSONS. PTC DOES NOT WARRANT THAT THE OPERATION OR OTHER USE OF THE HOSTED SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE OR WILL NOT CAUSE DAMAGE OR DISRUPTION TO HOSTED DATA.

(C) PTC'S MAXIMUM LIABILITY ARISING OUT OF, OR RELATING TO, THE CREATION, LICENSE, SUPPLY, FAILURE TO SUPPLY OR USE OF THE CLOUD SERVICES OR OTHERWISE RELATING TO THESE CLOUD SERVICES TERMS, WHETHER BASED UPON WARRANTY, CONTRACT, TORT, OR

OTHERWISE, SHALL NOT EXCEED THE FEES PAID TO PTC FOR THE CLOUD SERVICES DURING THE TWELVE MONTH PERIOD PRIOR TO THE EVENTS THAT GAVE RISE TO THE APPLICABLE CLAIM. IN NO EVENT SHALL PTC, ITS SUBSIDIARIES OR AFFILIATES, OR ANY OF THEIR DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION, LOSS OF USE OF DATA AND ANY LOSS CAUSED BY THE INTERRUPTION, TERMINATION OR FAILED OPERATION OF THE INTERNET, THIRD PARTY TELECOMMUNICATION SERVICES OR THIRD PARTY SECURITY FEATURES OR SYSTEMS), EVEN IF PTC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. CUSTOMER AGREES NOT TO BRING ANY SUIT OR ACTION AGAINST PTC AND/OR ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS FOR ANY REASON WHATSOEVER MORE THAN ONE YEAR AFTER THE CAUSE OF ACTION ARISES. CUSTOMER RECOGNIZES THAT THE CHARGES AND FEES HEREUNDER ARE BASED IN PART ON THE DISCLAIMER OF WARRANTY AND LIMITATION OF LIABILITY PROVISIONS SET FORTH HEREIN AND THAT, IN THE ABSENCE OF CUSTOMER'S AGREEMENT TO SUCH TERMS, PTC'S CHARGES TO CUSTOMER HEREUNDER WOULD BE SIGNIFICANTLY HIGHER. THE LIMITATIONS AND EXCLUSIONS SET FORTH IN THIS SECTION 11 SHALL NOT APPLY TO ANY CLAIM IN RESPECT OF DEATH OR PERSONAL INJURY IF CONTRARY TO ANY APPLICABLE LAW.

12. General.

(a) Force Majeure. 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, acts of third parties not under PTC's control, acts of any governmental body, war, insurrection, sabotage, armed conflict,

embargo, fire, flood, strike or other labour disturbance, interruption of or delay in transportation, unavailability of or interruption or delay in telecommunications or third party services, virus attacks or hackers, failure of third party software (including, without limitation, ecommerce software, payment gateways, chat, statistics or free scripts) or inability to obtain raw materials, supplies, or power used in or equipment needed for provision of Cloud Services.

(b) Export. Customer hereby warrants and represents that neither Customer nor any Users are listed on the U.S. Commerce Department's Denied Persons List, Entity List, or Unverified List, the U.S. State Department's Nonproliferation Sanctions List, or the U.S. Treasury Department's List of Specially Designated Nationals and Blocked Persons or the Sectoral Sanctions Identifications (SSI) List (each a "List", and collectively the "Restricted Party Lists"). The Restricted Party Lists can be found at: http://export.gov/ecr/eg_main_023148.asp. Customer shall not export or re-export, directly or indirectly, or provide to any other person or entity for export or re-export, or provide access to, the Cloud Services without first complying with all U.S. and applicable foreign export control regulations, including, without limitation, obtaining any necessary export or re-export consent from the U.S. Department of Commerce or other governmental authority. Customer will indemnify and hold PTC harmless against any damage, loss, liability or expense (including attorneys' fees) that PTC may incur as a result of Customer's failure to comply with this Section.

(c) Purchase Order. Any purchase order issued by Customer in connection with the Cloud Services shall be solely for Customer's internal administrative purposes and to facilitate payment. In no event shall the terms of such purchase order (other than the line items which are expressly incorporated by these Cloud Services Terms) modify or become part of these Cloud Services Terms or become binding on PTC even if an acknowledgment copy is signed by PTC.

Exhibit A Definitions

“Authorized Password” means a unique user name and password for use by one User only.

“Designated Technical Support Personnel” means the technical contacts that are trained subject matter experts on the Hosted Software and which have been identified in writing to PTC by Customer.

“Excused Downtime” means any and all of the following:

- (i) Force majeure events as set forth in Section 12 (a) of the Cloud Services Terms.
- (ii) Data transmission failures outside the control of PTC not caused by PTC’s negligence or willful misconduct.
- (iii) Downtime resulting from applications developed for or by Customer that are running on or interacting with the Hosted System.
- (iv) Downtime resulting from third party software utilized by the Customer that is not Hosted System and/or third party software integrations developed by or for Customer.
- (v) Downtime due to failure of the internet or failure of Customer’s network.
- (vi) Maintenance outages, if required, are conducted with advance notice to Customer. Maintenance outages include, but are not limited to, the installation of software updates, service packs and routine server and application configuration changes. PTC will endeavor to provide Customer with forty-eight (48) hours advance notice and limit these occurrences to emergency updates and maintenance.

“Hosted Data” means the data transmitted to, loaded into, or stored in, the Hosted Software or on the Hosted System by Customer and Users or otherwise through use of the Hosted Software.

“Hosted Software” means the standard commercially available PTC software, licensed to Customer under the terms of the License Agreement, for which PTC is providing the Cloud Services, as specified in the Quote, and any New Releases.

“Hosted System” means the servers and computer network on which PTC and/or its contractors provide Customer and other PTC customers remote access to the Hosted Software and Hosted Data.

“New Release” means updates and/or new releases to the Hosted Software that PTC elects, in its discretion, to apply to the Hosted Software. The entitlement to New Releases is not included with Cloud Services. New Releases to the Hosted Software are only available under a PTC Support services plan.

“PTC” means, as applicable, PTC Inc. or the local PTC subsidiary that issues the invoice(s) to Customer. In case the PTC subsidiary issuing the invoice(s) to the Customer is Parametric Technology GmbH or Parametric Technology (Schweiz) AG and the Customer is located in Germany, Austria or Switzerland, the Specific Provisions set out in Exhibit C shall apply on the Cloud Services to be provided by PTC.

“Reseller” means a third-party appointed and authorized by PTC to resell the Cloud Services to Customer.

“Service Term” means the term that PTC commits to perform the Cloud Services (i.e., the initial term and any renewal terms), per Section 10 of these Cloud Services Terms.

“User” means persons who are employees or consultants of either Customer or of a subcontractor, supplier, business partner, or customer of Customer, who are not, and are not employed by, competitors of PTC, and who Customer authorizes to access the Hosted Software and Hosted Data and who are authorized Users of the Hosted Software under the License Agreement.

“Workaround” means a change in the procedures followed or that Customer supplies to avoid a problem in the hosted environment without substantially impairing Customer’s use of the Hosted Software. A Workaround may be either temporary or permanent in nature.

Exhibit B-1

Cloud Services and Customer Responsibilities for SLM, PLM and Thingworx Products

Cloud Services afford customers access to the Hosted Software described in a Quote via a Hosted System managed by PTC. PTC shall use commercially reasonable efforts to maintain the Cloud Service features and levels described below throughout a Customer's initial committed Service Term. The Cloud Services are subject to change in connection with renewal periods with at least four (4) months advance written notice from PTC.

(1) General

PTC shall maintain a copy of the Hosted Software on the Hosted System and will allow Users to remotely access and interface, via the Internet using supported and properly configured web browsers, and with executing instance of the Software that is operating on and from a Hosted System. PTC will allow Users to access and modify the Hosted Data, and store additional Hosted Data, through Customer's use of the Cloud Services. All Cloud Services are provided in English.

(2) Cloud Services Facility

PTC uses reasonable industry measures designed to protect the operating environment of the Cloud Services and Hosted Software against unauthorized physical access and the threats of fire, power, temperature, humidity and other physical forces with the following capability:

- A secure data center with physical access limited to authorized personnel and protected by multi-level security systems. Other persons are admitted only on an as-needed and supervised basis (such as to maintain hardware components).
- Continuous, conditioned power supplied by a redundant power infrastructure, including battery backup systems and diesel-powered generators, with regular system testing for continuous availability.
- Redundant HVAC climate control and fire suppression systems.

(3) Availability SLA and Monitoring

PTC shall use commercially reasonable efforts to achieve at least 99.5% availability of the Cloud Services measured monthly, not including Excused Downtime, for production environments. PTC shall monitor the availability of the Hosted System 24/7.

(4) Additional Security Measures For Hosted Data

In addition to the physical access protections described above:

- PTC maintains controls consistent with the ISO 27002 framework.
- The Hosted Data is maintained in secure directories that require access authentication.
- PTC performs daily, weekly, and monthly backups of the Hosted Data. Hosted Data is stored offsite. Daily backups will be retained for 30 days. Monthly backups will be retained for at least three months.
- PTC maintains antivirus protection software on the Hosted System. In the event viruses, worms or similar problems are determined to have infected the Hosted System, PTC will use commercially reasonable efforts to restore the Hosted System as quickly as reasonably possible.
- Also see "Server Configuration" below.

In order to enhance data security, Customer is responsible for:

- Ensuring it uses utmost discretion in granting administrator privileges.
- Ensuring that its Users do not share their Authorized Passwords.
- Designing, authoring, validating, and approving all custom reports.

The scope of the Cloud Services does not include any Customer security requirements beyond those set forth in these Cloud Services Terms.

(5) Server Configuration.

PTC will provide sufficient server capacity to provide a productive operating environment for the scope of the Cloud Services specified in the Quote. Production environments will be configured in a redundant disk configuration to help ensure data availability and recovery. The operating system will be appropriate to the hardware selected for production and non-production use. Industry standard security patches, service packs and anti-virus software will be installed at initial implementation, and updated on a monthly or on an as needed basis, as applicable.

(6) Network Configuration.

Inbound and outbound traffic will be monitored through firewall(s), switches, routers and load balancers utilizing burstable bandwidth.

(7) Cloud Services Support.

- Cloud Services Support Hours. PTC's technical Cloud Services staff is available for support and troubleshooting by phone 24x7 for Severity 0 issues and for non-Severity 0 issues, from Monday through Friday, 8:00 A.M. to 5:00 P.M. local time where Customer's Designated Technical Support Personnel is located, excluding public holidays and other PTC-observed holidays. E-mail inquiries and cases are accepted 24x7.
- Designated Employees. For SLM and Thingworx products, two of Customer's Designated Technical Support Personnel shall be the only persons authorized to contact PTC via its support line in connection with Cloud Services. When PTC provides notification of scheduled outages, such Designated Technical Support Personnel shall promptly relay such notification in a timely manner to all of Customer's Users.
- Cloud Services Support Process. The support process begins when Customer notifies PTC's technical Cloud Services staff of an issue with which Customer requires assistance and opens a case. Customer will provide the following information in order to ensure the issue may be correctly and efficiently assessed and resolved: without limitation, the Customer name, case number and a detailed description of the issue. PTC shall assign a severity level to an issue upon initiation of the case based on the defined severity levels described below in this Exhibit B-1. Target resolution times are set forth below. PTC shall determine, at its discretion, based on availability of staff and experience, whether to allocate Customer's case to a named individual. In order to ensure continuity of service and professional call handling, PTC shall use reasonable efforts not to reassign technical Cloud Services staff members once they have been assigned to resolving a particular problem.
- Prioritization and Escalation. PTC shall use commercially reasonable efforts to resolve each significant issue by providing a Workaround, an object code patch or a specific action plan for how PTC will address the issue, and an estimate of how long it will take for the issue to be resolved.
- New Releases. Cloud Services support shall only apply if and for so long as Customer's underlying Licenses of the Hosted Software are current on PTC Support. Subject to the exclusions set forth below, Cloud Services will include installation of New Releases of the Hosted Software. In single-tenant Cloud Services environments, PTC will coordinate the installation of the New Releases with Customer to reasonably minimize disruption to Customer's operations. Generally, PTC will not upgrade the Hosted Software to the FCS (first customer ship) version of a major New Release. It is Customer's responsibility to test and validate their custom developed, created, or 3rd party applications in a test environment prior to moving them into production. This includes making any necessary modifications to those applications to be supported with the New Release.
- Maintenance Outage Delay. Within 24 hours of PTC's notice of a Maintenance outage, Customer may request in writing to PTC that such Maintenance outage be delayed due to extenuating Customer business needs; provided, that PTC shall not be required to delay any outage if such outage is required due to a security issue or to avoid the potential of an unplanned outage. In the event that PTC agrees to Customer's request, such delay shall not exceed ten (10) business days.

- Exclusions. Cloud Services support does not include:
 - Support on Customer’s site;
 - Design, code development, break-fixes, or testing of integrations, customizations and/or modifications;
 - Support for the Hosted Software (which is covered under the License Agreement);
 - Third party software included in the Cloud Services;
 - Customer developed and/or owned applications;
 - Issues caused by material changes to the configuration of the Hosted Software by Customer;
 - Errors caused by Customer’s negligence or fault;
 - Consulting or training services; or
 - Responsibility for changes to or replacement of any Customer hardware that may be necessary to use the Hosted Software due to a Workaround, fix or Hosted Software New Release.
- Severity, Initial Response Times and Resolution Targets: Case severity levels and associated initial response and estimated resolution times are as set forth below:

Severity Level	Initial Response	Target Resolution Time*
Severity 0 Hosting Problem (Note, Severity 0 problems cannot be communicated to PTC by email)	15 Minutes	2 Hours
Severity 1 Hosting Problem (Note, Severity 1 problems cannot be communicated to PTC by email)	2 Hours	4 Hours
Severity 2 Hosting Problem	4 Hours	24 Hours
Severity 3 Hosting Problem	2 Business Days	5 Business Days

* Target resolution times are measured from PTC’s initial response and reflect the target resolution times for hosting problems only, based on PTC using diligent efforts to return Customer to production status. Target resolution times do not apply to any issue covered in the “Exclusions” section above.

- Severity Definitions: For purposes of these Cloud Services Terms:
 - “Severity 0” means a problem in the Hosted System that causes substantial downtime of the Hosted System. Generally requires 24X7 availability of Customer’s Designated Technical Support Personnel. PTC will work 24X7 until the issue is resolved or the Severity is lowered. There is no viable Workaround available.
 - “Severity 1” means a problem in the Hosted System that results in the loss of critical functions of the Hosted Software or a limited number of Users cannot access the Hosted Software via the Cloud Services.
 - “Severity 2” means a problem in the Hosted System that impacts Cloud Services operations and/or efficiency but Customer is still able to use the Hosted Software. A Workaround is generally available.
 - “Severity 3” means a technical question about the Cloud Services or the Hosted System that does not impact Customer’s use of the Hosted Software.

- Customer Responsibilities

- Customer shall assist PTC in PTC's efforts to confirm and resolve hosting problems reported by Customer.
- Prior to reporting a hosting problem to PTC, Customer shall use commercially reasonable efforts to resolve the User's problem by utilizing all on-line information and resources made available by PTC.
- Customer shall ensure that any communications or documentation distributed by it to its Users clearly and conspicuously state that Users should call Customer for technical hosting problems related to the Hosted System or the Hosted Software. PTC will have no obligation to furnish any assistance, information or documentation directly to Users other than Customers Designated Technical Support Personnel.
- In certain situations, PTC may require detailed information regarding Customer's system environment to affect a timely resolution. In these situations, and other integration/gateway related issues, PTC may require the involvement of Customer's information technology staff to provide the information necessary to assist in problem resolution. Customer shall make such staff available to PTC in a timely manner.
- Customer is responsible for properly maintaining the functional operation of its information technology equipment and interfaces, including connectivity to the internet. Consulting, implementation, integration and support for Customer interfaces, or training services that may be needed for the Customer to take advantage of Hosted Software revisions or Hosted Software New Releases are not within the scope of Cloud Services.
- Prior to logging any connectivity problems, Customer shall verify that it is able to reach other popular internet sites such as Google (<http://www.google.com>) or Yahoo (<http://www.yahoo.com>).
- Customer is responsible for virus protection for Customer workstations and all of Customer's host systems that are networked to those workstations.
- Customer must use an internet browser that meets the requirements as published by PTC on the Technical Support page located at <https://www.ptc.com/appserver/cs/doc/refdoc.jsp> from time-to-time.
- Customer is responsible for configuration of its corporate internet firewall to allow all necessary ports to be used.

Exhibit B-2
Cloud Services and Customer Responsibilities
(for Axeda Products)

Cloud Services afford Customers access to the Hosted Software described in a Quote via a Hosted System managed by PTC. PTC shall use commercially reasonable efforts to maintain the Cloud Service features and levels described below throughout a Customer's initial committed Service Term. The Cloud Services are subject to change in connection with renewal periods with at least four (4) months advance written notice from PTC.

(1) General

PTC shall maintain a copy of the Hosted Software on the Hosted System and will allow Users to remotely access and interface, via the Internet using supported and properly configured web browsers, an executing instance of the Software that is operating on and from a Hosted System. All Cloud Services are provided in English.

(2) Cloud Services Facility

PTC uses reasonable industry measures designed to protect the operating environment of the Cloud Services and Hosted Software against unauthorized physical access and the threats of fire, power, temperature, humidity and other physical forces with the following capability:

- A secure data center with physical access limited to authorized personnel and protected by multi-level security systems.
- Continuous, conditioned power supplied by a redundant power infrastructure, including battery backup systems and diesel-powered generators.
- Redundant HVAC climate control and fire suppression systems.

(3) Availability SLA and Monitoring

PTC shall use commercially reasonable efforts to achieve at least 99.9% availability of the Cloud Services measured monthly, not including Excused Downtime, for production environments. PTC shall monitor the availability of the Hosted System 24/7.

(4) Additional Security Measures For Hosted Data

In addition to the physical access protections described above:

- PTC will audit its Service delivery for ISO-27001 compliance.
- PTC performs daily backups of the Hosted Data. Hosted Data is stored offsite. Backups will be retained for thirty (30) days.
- Also see "Server Configuration" below.

In order to enhance data security, Customer is responsible for:

- Ensuring it uses utmost discretion in granting administrator privileges.
- Ensuring that its Users do not share their Authorized Passwords.
- Designing, authoring, validating, and approving all custom reports.

The scope of the Cloud Services does not include any Customer security requirements beyond those set forth in these Cloud Services Terms.

(5) Server Configuration.

PTC will provide sufficient server capacity to provide a productive operating environment for the scope of the Cloud Services specified in the Quote. Production environments will be configured in a redundant disk configuration to help ensure data availability and recovery. The operating system will be appropriate to the hardware selected for production and test use.

(6) Network Configuration.

Inbound and outbound traffic will be monitored through firewall(s), switches, routers and load balancers utilizing burstable bandwidth.

(7) Cloud Services Support. This Section shall only apply if and for so long as Customer's underlying licenses of the Hosted Software are current on PTC Support:

- Cloud Services Support Hours. PTC's support staff is available for Cloud Services support and troubleshooting by phone 24x7 for Severity 0 issues and for non-Severity 0 issues, from Monday through Friday, 8:00 A.M. to 8:00 P.M. eastern time, excluding public holidays and other PTC-observed holidays. E-mail inquiries and cases are accepted 24x7.
- Designated Employees. Up to two of Customer's Designated Technical Support Personnel shall be the only persons authorized to contact PTC via its support line in connection with Cloud Services. When PTC provides notification of scheduled outages, such Designated Technical Support Personnel shall promptly relay such notification in a timely manner to all of Customer's Users.
- Cloud Services Support Process. The support process begins when Customer notifies PTC's technical support staff of an issue with which Customer requires assistance and opens a case. Customer will provide the following information in order to ensure the issue may be correctly and efficiently assessed and resolved: without limitation, the Customer name, case number and a detailed description of the issue. PTC shall assign a severity level to an issue upon initiation of the case based on the defined severity levels described below in this Exhibit B-2. Target initial response times are set forth below. PTC shall determine, at its discretion, based on availability of staff and experience, whether to allocate Customer's case to a named individual. In order to ensure continuity of service and professional call handling, PTC shall use reasonable efforts not to reassign technical support staff members once they have been assigned to resolving a particular problem.
- Prioritization and Escalation. PTC shall use commercially reasonable efforts to resolve each significant issue by providing a Workaround, an object code patch or a specific action plan for how PTC will address the issue, and an estimate of how long it will take for the issue to be resolved.
- Notifications. Customer will receive advance notifications of dates and times for provisioning of all major, minor, maintenance and hot fixes released by PTC and to be installed on the Hosted System. Customer will receive notification of all unplanned production system outages as soon as reasonably possible following the outage.
- New Releases. Cloud Services support shall only apply if and for so long as Customer's underlying Licenses of the Hosted Software are current on PTC Support. Subject to the exclusions set forth below, Cloud Services will include installation of New Releases of the Hosted Software. In single-tenant Cloud Services environments, PTC will coordinate the installation of the New Releases with Customer to reasonably minimize disruption to Customer's operations. Generally, PTC will not upgrade the Hosted Software to the FCS (first customer ship) version of a major New Release. It is Customer's responsibility to test and validate their custom developed, created, or 3rd party applications in a test environment prior to moving them into production. This includes making any necessary modifications to those applications to be supported with the New Release.
- Maintenance Outage Delay. Within 24 hours of PTC's notice of a Maintenance outage, Customer may request in writing to PTC that such Maintenance outage be delayed due to extenuating Customer business needs; provided, that PTC shall not be required to delay any outage if such outage is required due to a security issue or to avoid the potential of an unplanned outage. In the event that PTC agrees to Customer's request, such delay shall not exceed ten (10) business days.
- Exclusions. Cloud Services Support does not include:
 - Support on Customer's site;
 - Design, code development, break-fixes, or testing of integrations, customizations and/or modifications;
 - Support for the Hosted Software (which is covered under the License Agreement);

- Third-party Hosted System software. PTC supports its products for use with the PTC Hosted System software supplied by PTC but does not support the third-party product itself. Third party products include, but are not limited to, operating systems, databases, and web and application servers;
 - Customer developed and/or owned applications;
 - Issues caused by material changes to the configuration of the Hosted Software by Customer;
 - Errors caused by Customer’s negligence or fault; or
 - Consulting or training services.
- Severity and Initial Response Targets: Case severity levels and associated estimated initial response times are as set forth below:

Severity Level	Severity Definition	Target Initial Response Time
Severity 0 Hosting Problem (Note, Severity 0 problems cannot be communicated to PTC by email)	A problem in the Hosted System that causes the Axeda production environment and all major documented functionality to be unusable by the Customer.	2 hours
Severity 1 Hosting Problem (Note, Severity10 problems cannot be communicated to PTC by email)	A problem in the Hosted System that causes the Axeda production environment to be usable by the Customer, but with significant or major documented functionality not working properly.	4 business hours
Severity 2 Hosting Problem	A problem in the Hosted System where the Axeda production environment is usable, but with minor degradation in one or more components. Axeda non-production environment (e.g. sandbox) is unusable or has degraded performance.	1 business day
Severity 3 Hosting Problem	A problem in the Hosted System that causes the Axeda production or non-production environment (e.g. sandbox) to experience a minor issue or problem with its use. This severity level also includes requests for information.	2 business days

- Customer Responsibilities
 - Customer shall assist PTC in PTC’s efforts to confirm and resolve hosting problems reported by Customer.
 - Prior to reporting a hosting problem to PTC, Customer shall use commercially reasonable efforts to resolve the User’s problem by utilizing all on-line information and resources made available by PTC.
 - Customer shall ensure that any communications or documentation distributed by it to its Users clearly and conspicuously state that Users should call Customer for technical hosting problems related to the Hosted System or the Hosted Software. PTC will have no obligation to furnish any assistance, information or documentation directly to Users other than Customer’s Designated Technical Support Personnel.
 - In certain situations, PTC may require detailed information regarding Customer’s system environment to affect a timely resolution. In these situations, and other integration/gateway related issues, PTC may require the involvement of Customer’s information technology staff to provide the information necessary to assist in problem resolution. Customer shall make such staff available to PTC in a timely manner.

- Customer is responsible for properly maintaining the functional operation of its information technology equipment and interfaces, including connectivity to the internet. Consulting, implementation, integration and support for Customer interfaces, or training services that may be needed for the Customer to take advantage of Software revisions or Software New Releases are not within the scope of Cloud Services Support.
- Prior to logging any connectivity problems, Customer shall verify that it is able to reach other popular internet sites such as Google (<http://www.google.com>) or Yahoo (<http://www.yahoo.com>).
- Customer is responsible for virus protection for Customer workstations and all of Customer's host systems that are networked to those workstations.
- Customer must use an internet browser that meets the requirements as published by PTC on the Technical Support page located at <https://www.ptc.com/appserver/cs/doc/refdoc.jsp> from time to time.
- Customer is responsible for configuration of its corporate internet firewall to allow all necessary ports to be used.

Exhibit C
Specific Provisions for Germany, Austria and Switzerland

For Cloud Services provided by Parametric Technology GmbH or Parametric Technology (Schweiz) AG for Customers located in Germany, Austria or Switzerland, the following provisions shall apply. The following provisions shall have no applicability to any Cloud Services provided to Customers located outside Germany, Austria or Switzerland. References to sections below are references to the applicable sections in the main body of the PTC Cloud Services Terms and Conditions.

- Section 2 (c) is hereby replaced by the following provision:

Availability and Support SLAs. PTC will use commercially reasonable efforts to maintain the uptime availability and support response times for the Cloud Services as specified in Exhibit B. Exhibit B is comprised of two attachments: Exhibit B-1 for PTC's PLM, SLM and Thingworx products, and Exhibit B-2 for PTC's Axeda products. The applicable Exhibit shall be determined by the type of Hosted Software to which the Cloud Services relate. The envisaged uptime availability and support response times set out in Exhibit B-1 and Exhibit B-2 are not to be regarded as warranted qualities (zugesicherte Eigenschaften), guarantee (Garantie) or guarantee as to condition (Beschaffenhheitsgarantie) but are only to be understood as description of the support provided under the Cloud Services.

- Section 11 (B) is hereby replaced by the following provisions:

11 (B) (1) Customer is obliged to immediately give notice to PTC on any non-availability or limited availability of the Cloud Services. In the event Customer fails to comply with this obligation, PTC shall have no liability to the Customer with regard to non-availability or limited availability for the term in which the Customer has not provided such notice to PTC.

11 (B) (2) Any possible liability regardless of fault by PTC for any defects of the Cloud Services shall be excluded.

11 (B) (3) In case of a liability on the merits for defects, with respect to such defects, Customer shall solely be entitled to possible damage claims according to Section (C). Any other or additional warranty claims shall be excluded. Possible rights of the Customer according to Section 10 (b) shall remain unaffected.

11 (B) (4) No employee, partner, distributor or agent of PTC or any of its resellers or sales agents is authorised to give any representations, warranties or covenants greater or different than those contained in these PTC Cloud Services Terms and Conditions, except as specifically set forth in an agreement signed on behalf of Customer by an authorised officer and on behalf of PTC by its legal counsel or Finance Director.

11 (B) (5) Qualities (*Beschaffenheit*) of the Cloud Services stated in publications of PTC or its sales representatives, in particular in advertising, in drawings, brochures or other documents, including presentations in the Internet or which fall under trade usages, shall only be deemed to be covered by the contractual quality of the Cloud Services if such qualities are expressly contained in an offer or an order confirmation in writing. Guarantees, in particular guarantees as to quality, shall be binding on PTC only to the extent to which they (i) are contained in an offer or an order confirmation in writing, (ii) are expressly designated as "guarantee" or "guarantee as to condition" (Beschaffenhheitsgarantie), and (iii) expressly stipulate the obligations for PTC resulting from such guarantee.

- Section 11 (C) is hereby replaced by the following provisions:

11 (C) (1) PTC is liable for any damage, regardless of the legal grounds, only if (i) PTC breaches a material contractual obligation (cardinal obligation) culpably (i.e. at least negligently), or (ii) the damage has been caused by gross negligence or wilful intent on the part of PTC or (iii) PTC has assumed a guarantee.

11 (C) (2) PTC's liability shall be limited to the typical, foreseeable damage (i) if PTC breaches material contractual obligations (cardinal obligations) with slight negligence, or (ii) if employees or agents of PTC who are not officers or executive staff have breached other obligations by gross negligence, or (iii) if

PTC has assumed a guarantee, unless such guarantee is expressly designated as guarantee as to condition (Beschaffheitsgarantie).

11 (C) (3) In the cases of Section 11 (C) (2) (i) and (ii), PTC's liability is limited per contractual year to an amount equal to the fees (a) paid by Customer to PTC for the Cloud Services in the twelve months period before the cause of action arose or (b) – if the Customer purchased the Cloud Services less than twelve months before the cause of action arose – payable by Customer to PTC for the Cloud Services within the first twelve months from Customer's purchase of the Cloud Services, yet both in the case of (a) and (b) limited to maximum amounts not exceeding EURO 250.000,-, respectively EURO 50.000,- for financial losses.

11 (C) (4) In the cases of Section 11 (C) (2) PTC shall not be liable for any special, indirect or consequential damages, including without limitation lost profits, lost savings or damages resulting from the loss or use of Hosted Data.

11 (C) (5) Notwithstanding the applicability of the limitations of liability set out above, in case of a loss of Hosted Data PTC is only liable for the costs of the recovery of such Hosted Data.

11 (C) (6) Customer's claims for damages against PTC and/or PTC's affiliates, regardless of the legal grounds, shall expire at the latest one year from the time the Customer gains knowledge of the damage or, irrespective of this knowledge, at the latest two years after the damaging event.

11 (C) (7) PTC's liability pursuant to the German Product Liability Act (Produkthaftungsgesetz), for injury of life, body and health, for fraudulent concealment of a defect or for the assumption of a guarantee as to condition (Beschaffheitsgarantie) remains unaffected.

11 (C) (8) 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 Cloud Services.

11 (C) (9) In the event of a guarantee or liability claim against PTC any contributory fault of Customer must be taken into account accordingly, particularly in the event of inadequate fault notification or inadequate data securing. It constitutes inadequate data securing if the client, among others, does not, by way of appropriate state of the art security measures, take precautions against external influences, e.g. computer viruses and other phenomena which could put individual data or an entire data stock at risk, or if Customer does not perform regular backups of the data himself.

11 (C) (10) Sections 11 (C) (1) to 11 (C) (9) shall also apply in the case of any claims for damages of Customer against employees or agents of PTC and/or PTC's affiliates.

- Section 12 (c) is hereby replaced by the following provisions:

Purchase Order. Any purchase order issued by Customer in connection with the Cloud Services shall be solely for Customer's internal administrative purposes and to facilitate payment. In no event shall the terms of such purchase order (other than the line items which are expressly incorporated by these Cloud Services Terms) modify or become part of these Cloud Services Terms or become binding on PTC.