

HIPERLOGIC, LLC D/B/A TOTALCAE (“TOTALCAE”)

HIGH PERFORMANCE COMPUTING SOLUTIONS

TERMS OF SERVICE

PLEASE READ CAREFULLY: THESE TERMS OF SERVICE (“AGREEMENT”) ARE ENTERED INTO BY AND BETWEEN HIPERLOGIC, LLC D/B/A TOTALCAE (“TOTALCAE”) AND THE CUSTOMER SET FORTH IN THE APPLICABLE ORDER (“CUSTOMER”) (EACH A “PARTY” AND COLLECTIVELY, “THE PARTIES”).

IF YOU ARE ACCEPTING THIS AGREEMENT ON BEHALF OF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND THE CUSTOMER TO THIS AGREEMENT. THIS AGREEMENT GOVERNS THE PROVISION OF **TOTALCAE’S** HIGH PERFORMANCE COMPUTING SOLUTIONS (COLLECTIVELY, THE “HPC SOLUTIONS”) (AS DEFINED BELOW). BY USING TOTALCAE’S HPC SOLUTIONS, CUSTOMER ACCEPTS THIS AGREEMENT AND THE AGREEMENT WILL BE DEEMED A BINDING CONTRACT BETWEEN **TOTALCAE** AND CUSTOMER.

CUSTOMER’S USE OF **TOTALCAE’S** HPC SOLUTIONS IS SUBJECT TO THIS AGREEMENT REGARDLESS OF OTHER OR ADDITIONAL TERMS OR CONDITIONS THAT CONFLICT WITH OR CONTRADICT THIS AGREEMENT IN ANY PURCHASE ORDER, DOCUMENT, OR OTHER COMMUNICATION. PREPRINTED TERMS AND CONDITIONS ON ANY DOCUMENT OF CUSTOMER AND/OR **TOTALCAE’S** FAILURE TO OBJECT TO CONFLICTING OR ADDITIONAL TERMS WILL NOT CHANGE OR ADD TO THE TERMS OF THIS AGREEMENT.

These terms and conditions are binding upon Customer as of the earlier of the date that Customer accepts them or the date on which Customer accesses or uses any HPC Solutions.

1. Definitions.

- a. “Customer” means the Party (and any expressly included affiliates) identified in the Order.
- b. “Customer Data” means any data, information, or applications originated by Customer or Customer Representatives that Customer or Customer Representatives enter or store in the HPC Solutions.
- c. “Documentation” means the written and/or electronic release notes, implementation guides, or other published technical documentation about the applicable HPC Solutions provided by TOTALCAE to Customer together with access to the HPC Solutions.
- d. “Hybrid Cloud Customer” is a Customer who has both private and public cloud CAE clusters managed by TOTALCAE.

e. "License Term" means the term of the access rights granted for the applicable HPC Solutions, as identified in the relevant Order, starting when TOTALCAE delivers to Customer the relevant credentials to access and use the applicable HPC Solutions.

f. "On Premises Customer" is a Customer whose CAE cluster (whether Customer furnished - #2 on Exhibit C - or resold to Customer by TOTALCAE - # 1 on Exhibit C) is located and managed by TOTALCAE at the Customer's site with the HPC Solution installed on the on-premises cluster.

g. "Order" means any purchase order, product schedule or ordering document between Customer and TOTALCAE that identifies the licensed HPC Solutions and any applicable licensing parameters (e.g. the number of authorized users).

h. "HPC Solutions" means the CAE cluster management products and services made available by access to and use of software hosted by TOTALCAE, including any Software-as-a-Service or "SaaS," to which Customer has been granted a license under the relevant Order. References in this Agreement to the HPC Solutions shall include the Software.

i. "HPC Solutions Customer" is a customer who manages its own on-premises or cloud based HPC cluster, and TotalCAE only provides and supports the HPC Solutions and supports Customer supplied associated application integrations (#5 and #6 on Exhibit C).

j. "Software" means the object code version of TOTALCAE proprietary computer programs made available to Customer by TOTALCAE for use in connection with any HPC Solutions, including any Documentation and Updates.

k. "TOTALCAE Hosted Cloud Customer" is a Customer subscribing to HPC Solutions whose HPC infrastructure is provided and managed by TOTALCAE in the cloud through a cloud provider subscribed to by TOTALCAE (#3 on Exhibit C).

l. "TotalCAE Managed Cloud Customer" is a Customer subscribing to HPC Solutions whose HPC infrastructure is purchased by Customer from a cloud provider and managed through Customer's cloud subscription by TOTALCAE (#4 on Exhibit C).

m. "Updates" means any correction, update, upgrade, patch, or other modification or addition made by TOTALCAE to the Software.

2. **Orders.** Quotes from TOTALCAE are subject to change at any time without notice. All Orders are subject to acceptance by TOTALCAE. Contracts between Customer and TOTALCAE are formed upon TOTALCAE's written acceptance or execution of Customer's Order and shall be subject to this Agreement. All Orders accepted by TOTALCAE including, but not limited to, Electronic Purchase Orders, are non-cancelable and non-returnable by Customer. Customer may not modify or reschedule Orders without TOTALCAE's consent. TOTALCAE may cancel any Order for any reason. TOTALCAE reserves the right to allocate the timing of the delivery of hardware and/or HPC Solutions among its Customers. TOTALCAE reserves in its

sole discretion the right to substitute products, brands, and services with items of similar or higher, in its sole opinion, value.

3. **Rights of Access and Use.**

a. **Access and Use.** Subject to this Agreement, during the applicable License Term, TOTALCAE grants to Customer a limited (i) non-exclusive, non-transferable and non-sublicensable license for Customer to access and use the HPC Solutions, in each case, solely for Customer's internal use with Customer's ordinary business operations and in accordance with the applicable Documentation, and (ii) for all Customers except TOTALCAE Hosted Cloud Customers,, the right to maintain a reasonable number of copies of the Software for backup and recovery purposes. All Customers may provide access to the HPC Solutions to its employees, contractors, and other individual users to access and use the HPC Solutions on its behalf and solely for its internal business purposes in compliance with this Agreement, provided Customer shall be responsible for all such users' use.

b. **Trial License.** This Agreement applies to trial copies of the HPC Solutions ("Trial Product"), except for the following different or additional terms: (i) the License Term for Trial Product is fourteen (14) days (the "Trial Period"), which TOTALCAE may extend upon written notice; (ii) the Trial Period shall commence on the date that TOTALCAE first provides Customer credentials to access the Trial Product; (iii) the Trial Product is provided "AS IS" without warranty of any kind, and TOTALCAE disclaims all warranties, indemnities, and all other liabilities for the Trial Product; (iv) Customer is not entitled to any support and maintenance services or any Updates for the Trial Product; and (v) either party may terminate the Trial Period and the license for the Trial Product at any time without notice.

4. **Use Restrictions; Customer Obligations.** As a condition of the license granted in Section 2, Customer shall not itself and shall not authorize or permit any third party to: (a) reverse engineer, decompile, decode, decrypt, disassemble, or attempt to derive any source code from the HPC Solutions; (b) modify, adapt, or create any derivative works based on the HPC Solutions; (c) distribute, sell, license, lease, transfer, or otherwise provide any HPC Solutions to third parties except as expressly provided in this Agreement; (d) provide the HPC Solutions as a service to unaffiliated third parties, including but not limited to a service bureau, SaaS, or time-sharing basis; (e) unbundle any component of any HPC Solutions; or (f) use the Documentation except for supporting Customer's authorized use of the HPC Solutions. Customer shall use commercially reasonable efforts to prevent unauthorized access to or use of any HPC Solutions and notify TOTALCAE promptly of any unauthorized access or use.

5. **Payment; Additional Licenses; Reporting.** Customer shall pay the fees for TOTALCAE HPC Solutions as set forth in the applicable Order. All fees shall be paid in U.S. dollars, without offset or deduction, within thirty (30) days of invoice. Past due invoices will bear interest at 18% per cent per annum (or such lower amount as permitted by applicable local law), plus attorney fees and collection costs. Customer shall in addition pay all applicable taxes, sales tax, shipping charges, freight, duties, fees for special packaging and labeling, permits, certificates, customs declarations and registration or similar charges, excluding taxes on TOTALCAE's net income (collectively, "Additional Fees"). Customer is responsible to pay all Additional Fees. Customer

must supply tax exemption documentation or direct pay certificate to qualify for tax exempt or direct pay treatment.

At any time, TOTALCAE may change the terms of Customer's credit, require financial data from Customer for verification of Customer's creditworthiness, require a bank guarantee or other security, or suspend any outstanding Orders of Customer. TOTALCAE may apply payments to any of Customer's accounts. If Customer defaults on any payment under this Agreement, TOTALCAE may reschedule or cancel any outstanding delivery and declare all outstanding invoices due and payable immediately.

If the actual number of registered devices or users (as applicable) exceed the number of licenses granted to Customer in the applicable Order, then Customer shall (a) immediately cease such excess usage or (b) pay to authorize additional licenses to cover the excess usage. Fees for excess usage shall be based on TOTALCAE's then-current price list or specified in the Order. Customer acknowledges that TOTALCAE's delivery and support infrastructure may enable TOTALCAE to access the device or user count for the HPC Solutions. Upon written notice by TOTALCAE, Customer shall certify in writing the number and type of registered devices or users.

In the event Customer has been issued a license by an authorized reseller of TOTALCAE, payment terms shall be set forth in the Order.

6. **Confidentiality.**

a. **Definition.** "Confidential Information" means non-public information provided by one party ("Discloser") to the other ("Recipient") that is designated as confidential or reasonably should be considered as such, excluding information that (i) is or becomes public through no fault of the Recipient, (ii) was known to Recipient before the disclosure, (iii) is disclosed to Recipient by a third party without violation of any confidentiality restrictions, or (iv) is independently developed by the Recipient without access to or use of the Discloser's information. TOTALCAE Confidential Information includes but is not limited to all HPC Solutions (and any derivatives, performance data, benchmark results, security assessments, product roadmaps and any other technical information relating to the HPC Solutions), Documentation and its derivatives, and TOTALCAE's pricing.

b. **Non-disclosure and Non-Use.** The Recipient shall (i) only use the Confidential Information of the Discloser to exercise its rights and/or to perform under this Agreement, (ii) use the same degree of care to prevent unauthorized use and disclosure of Discloser's Confidential Information as it does for its own confidential information, but in no event less than reasonable care, and (iii) with respect to employees, contractors, or agents of Recipient, limit access to the Discloser's Confidential Information only to those employees, contractors, or agents who have a need to access such Confidential Information and who are subject to confidentiality obligations at least as restrictive as those specified in this Section 6. The Recipient may disclose the Discloser's Confidential Information to the extent required by any court, governmental body, or law or regulation, provided that, if legally permissible, Recipient shall provide prompt written notice to the Discloser of such disclosure. Upon written request of the Discloser, the Recipient shall return or destroy, at Discloser's option, the Discloser's Confidential Information.

7. **Ownership.** TOTALCAE and its suppliers own and retain all right, title, and (except as expressly licensed in this Agreement) interest in and to the HPC Solutions and its derivative works. Customer is not obligated to provide TOTALCAE with any suggestions or feedback about the products or services (“Feedback”). To the extent Customer does provide Feedback to TOTALCAE, Customer assigns ownership of such Feedback to TOTALCAE and TOTALCAE may use and modify such Feedback without any restriction or payment.

8. **Indemnity.**

a. **Indemnification by TOTALCAE.** TOTALCAE shall at its cost and expense (i) defend or settle any claim brought against Customer and its directors, officers and employees (“Customer Indemnitee(s)”) by an unaffiliated third party alleging that Customer’s use of the HPC Solutions infringes or violates that third party’s intellectual property right(s), and (ii) pay, indemnify and hold Customer Indemnitees harmless from any settlement of such claim or any damages finally awarded to such third party by a court of competent jurisdiction as a result of such claim.

b. **Remedies.** If a claim under Section 8(a) occurs or in TOTALCAE’s opinion is reasonably likely to occur, TOTALCAE may at its expense and sole discretion and as Customer’s sole and exclusive remedy: (i) procure the right to allow Customer to continue using the applicable HPC Solutions, (ii) modify or replace the applicable HPC Solutions to become non-infringing, or (iii) if neither (i) nor (ii) is commercially practicable, terminate Customer’s license to the affected portion of applicable HPC Solutions and refund a portion of the pre-paid, unused license fees paid by Customer corresponding to such HPC Solutions.

c. **Exclusions.** TOTALCAE shall have no obligations under this Section 8 to the extent that the claim is based upon or arises out of: (i) any modification to the applicable HPC Solutions not made by or at the direction of TOTALCAE, (ii) any combination or use of the applicable HPC Solutions with any third party equipment, products or systems, to the extent that such claim is based on such combination or use, (iii) Customer’s continued use of the allegedly infringing technology after being notified of the infringement claim, (iv) Customer’s failure to use Updates made available by TOTALCAE, (v) Customer’s failure to use the HPC Solutions in accordance with the applicable Documentation, and/or (vi) use of the HPC Solutions outside the scope of the license granted under this Agreement. **This Section 8 constitutes Customer’s sole and exclusive remedies, and TOTALCAE’s entire liability, with respect to infringement of third-party intellectual property rights.**

d. **Indemnification by Customer.** Except to the extent set forth in Section 8(a), Customer shall at its cost and expense (i) defend or settle any claim, suit, demand, or enforcement action brought against TOTALCAE and its directors, officers and employees (collectively “TOTALCAE Indemnitees”) by a third party alleging that TOTALCAE’s use of or access to Customer Data infringes or violates a third party’s intellectual property, privacy or other right(s) or otherwise damages such third party, and (ii) pay, indemnify and hold TOTALCAE Indemnitees harmless from any settlement of such claim or any damages, fines, or penalties resulting therefrom. “Customer Data” means any data or information originated by Customer or Customer Representatives that Customer or Customer Representatives enter or store in the course of using HPC Solutions. TOTALCAE reserves the right to participate in any such defense at its own

expense and Customer shall not settle any such dispute without TOTALCAE's express consent, which consent shall not be unreasonably withheld.

e. Procedures. Each indemnitor's indemnification obligation is conditioned on the indemnitee: (i) giving the indemnitor prompt written notice of such claim, (ii) permitting the indemnitor to solely control and direct the defense or settlement of such claim, provided the indemnitor shall not settle any claim in a manner that requires the indemnitee to admit liability or pay money without the indemnitee's prior written consent, and (iii) providing the indemnitor all reasonable assistance in connection with the defense or settlement of such claim, at the indemnitor's cost and expense.

9. Support and Maintenance Services, and Hardware Products .

a. Support and Maintenance Services. Support and maintenance services shall be provided in accordance with the support and maintenance terms and conditions specified in **Schedule A**.

b. Hardware Product Terms. As a convenience to Customer, TOTALCAE resells certain products ("Hardware Products") that are manufactured by third party vendors. Hardware Products resold to Customer are not included as part of the HPC Solutions. Hardware Products may be subject to separate terms with the applicable third-party vendors. If support and maintenance is offered for a specific Hardware Product purchased by Customer from TOTALCAE, TOTALCAE shall distribute the applicable Hardware Product documentation provided to TOTALCAE by the third-party vendor. Other terms applicable to Hardware Product sales are set forth in **Schedule B**.

d. Third-Party Services. The HPC Solutions may contain features designed to interface with applications or services provided or made available by third parties ("Third Party Services"). In order to use a feature in connection with a Third-Party Service, Customer must have a license from the provider of the relevant Third-Party Service. If the Third-Party Services are no longer available or if the applicable third-party provider no longer allows the Third-Party Services to interface with the HPC Solutions, then such features will no longer be available or function in the HPC Solutions. TOTALCAE disclaims all warranties, indemnities, obligations, and other liabilities in connection with any interface or integration with any Third-Party Service. Further, TOTALCAE disclaims all warranties, indemnities, obligations, and other liabilities in connection with any Third-Party Service.

10. Warranties.

a. HPC Solutions. TOTALCAE represents and warrants to Customer that the applicable HPC Solutions materially conforms to the specifications specified in the relevant Documentation. Customer must notify TOTALCAE of any warranty deficiencies within thirty (30) days from the provision of the deficient HPC Solutions. Customer's sole and exclusive remedy and the entire liability of TOTALCAE for TOTALCAE's breach of this warranty will be for TOTALCAE, at its option, to (i) repair such HPC Solutions (and/or deliver conforming HPC Solutions) at its expense or (ii) terminate the applicable License Term and refund any prepaid, unused

subscription fees paid to TOTALCAE for the unused period of any such terminated License Term.

b. **Professional Services.** Customer may order TOTALCAE professional services. Such professional services shall be subject to the terms and conditions of this Agreement and mutually agreed-upon statement of work (if any). For ninety (90) days following the date of delivery of any professional service by TOTALCAE to Customer, TOTALCAE represents and warrants that such professional services shall be professional, workman-like and performed in a manner conforming to generally accepted industry standards and practices for similar services. Customer's sole and exclusive remedy and the entire liability of TOTALCAE for TOTALCAE's breach of this warranty will be for TOTALCAE, at its option, to provide replacement conforming services at its expense or refund the fees paid for such non-conforming professional services.

c. **Exclusions.** The express warranties do not apply if the applicable HPC Solutions or the hardware on which it is installed or used (i) has been modified, except by or at the direction of TOTALCAE, (ii) has not been installed, used, or maintained in accordance with this Agreement and Documentation, (iii) has been subjected to abnormal physical or electrical stress, excessive heat, misuse, negligence or accident, and/or (iv) is used with equipment, products or systems not specified in the Documentation. Additionally, these express warranties only apply if notice of a warranty claim is provided within the applicable warranty period.

d. **Disclaimer.** TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EXCEPT FOR THE WARRANTIES EXPRESSLY STATED IN THIS SECTION 10, TOTALCAE PROVIDES NO OTHER REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, AND TOTAL CAE SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

UNDER NO CIRCUMSTANCES SHALL TOTALCAE BE RESPONSIBLE OR LIABLE IN ANY MANNER OR TO ANY EXTENT FOR THE OPERATION OR AVAILABILITY OF THE CLOUD PROVIDER TO WHICH TOTALCAE HAS SUBSCRIBED IN ORDER TO FURNISH CUSTOMER WITH CLOUD-BASED HARDWARE, INCLUDING BUT NOT LIMITED TO: INABILITY TO USE THE CLOUD SERVICES, INTERRUPTIONS, ERRORS, DELAYS OR REDUCED SPEED OF, WITH OR CAUSED BY CLOUD SERVICES, INABILITY TO ACCESS OR RETRIEVE DATA, LOSS OR ALTERATION OF DATA, OR SECURITY BREACHES OF ANY KIND.

e. **Hardware Product.** To the extent that a third-party vendor provides TOTALCAE with any indemnities or warranties for pass-through to customers in connection with the applicable Hardware Product, TOTALCAE will pass such indemnities or warranties through to Customer. **EXCEPT FOR SUCH PASS-THROUGH WARRANTIES (IF ANY), HARDWARE PRODUCTS ARE PROVIDED "AS IS," AND TOTALCAE PROVIDES NO OTHER WARRANTIES OF ANY KIND RELATING TO THEM. TOTALCAE DISCLAIMS ALL**

OTHER WARRANTIES, INCLUDING FOR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, AND ANY LOST PROFITS, LOST BUSINESS OPPORTUNITIES, LOST DATA, OR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES CAUSED BY SUCH HARDWARE PRODUCT. IN NO EVENT WILL TOTALCAE'S LIABILITY ARISING OUT OF OR IN CONNECTION WITH ANY HARDWARE PRODUCT (UNDER ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STATUTE, TORT OR OTHERWISE) EXCEED THE AMOUNTS RECEIVED BY TOTALCAE FOR (a) SUCH HARDWARE PRODUCT DURING THE TWELVE-MONTH PERIOD BEFORE THE EVENT GIVING RISE TO SUCH LIABILITY OR (b) ASSOCIATED SUPPORT AND MAINTENANCE SERVICES IN THE THEN-CURRENT TERM.

TOTALCAE HAS NO RESPONSIBILITY WHATSOEVER FOR CUSTOMER FURNISHED HARDWARE OR APPLIANCES ON WHICH TOTALCAE SOFTWARE OR SaaS PRODUCTS ARE INSTALLED OR USED. CUSTOMER HAS AND ASSUMES ALL RESPONSIBILITY AND RISK FOR THE OPERATION, MAINTENANCE AND SUPPORT OF CUSTOMER FURNISHED HARDWARE AND APPLIANCES.

11. **Term and Termination**. The access rights granted herein with respect to the HPC Solutions shall remain effective until the License Term for the relevant HPC Solutions expires or the license for the relevant HPC Solutions is terminated. This Agreement shall remain effective until the earliest of termination in accordance with this Section 11, or expiration of the applicable License Term. If TOTALCAE agrees to reinstate a lapsed subscription license, then the terms of this Agreement shall apply. Either party may terminate this Agreement: (a) upon thirty (30) days' written notice of a material breach by the other party (or three (3) business days in the case of a failure to pay), unless the breach is cured within the notice period, or (b) immediately, if the other party ceases to do business, becomes insolvent, or seeks protection under any bankruptcy or comparable proceedings. In addition, the parties may terminate this Agreement by mutual written consent. All other licenses terminate upon expiration of this Agreement. In addition, Sections 1, 4-8, and 10-15, and all liabilities that accrue prior to termination shall survive expiration or termination of this Agreement for any reason.

12. **Data Destruction, Use of HPC Solutions and Access to Customer Data After Expiration or Termination.**

a. **On Premise Customers, HPC Solutions Customers and TOTALCAE Managed Cloud Customers.** The right of such Customers to use HPC Solutions shall terminate upon expiration or termination of this Agreement. Because all Customer Data for such Customers is stored either on its own HPC hardware or on its own cloud subscription, TOTALCAE has no post termination access to or responsibility for the Customer Data of such Customers.

b. **TOTALCAE Hosted Cloud Customers.** The right of such Customers to use HPC Solutions shall terminate upon expiration or termination of this Agreement. Such Customers who wish to retrieve applications or Customer Data may not do so unless they request and authorize invoicing for such access prior to expiration or termination of this Agreement, **IN ADDITION AND NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, ACCESS**

BY SUCH CUSTOMERS TO HPC SOLUTIONS AND CUSTOMER DATA IS SUBJECT TO IMMEDIATE TERMINATION WITHOUT NOTICE IN THE EVENT SUCH CUSTOMER FAILS TO MAINTAIN AN ADEQUATELY FUNDED PURCHASE ORDER FOR SUCH ACCESS.

c. For five (5) days after the expiration or termination of this Agreement, TOTALCAE shall permit HPC Solution Customers and TOTALCAE Hosted Customers to access the HPC Solutions solely to the extent necessary for such Customer to retrieve Customer Data uploaded to such HPC Solutions by such Customer and for no other use whatsoever, and only on the condition that they have fully paid all TOTALCAE invoices and charges. After such 5-day period, TOTAL CAE may permanently suspend all such access to and/or disable HPC Solutions and Software **AND PERMANENTLY DELETE ALL CUSTOMER DATA OF SUCH CUSTOMERS IN TOTALCAE'S POSSESSION OR CONTROL**

13. Limitation of Liabilities. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EXCEPT FOR ANY BREACHES OF OR FOR LIABILITY ARISING OUT OF SECTION 3 (RESTRICTIONS) OR A PARTY'S INDEMNIFICATION OBLIGATIONS UNDER THIS AGREEMENT, OR CUSTOMER'S PAYMENT OBLIGATIONS, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY IN CONNECTION WITH THIS AGREEMENT OR THE SUBJECT MATTER HEREOF (UNDER ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STATUTE, TORT OR OTHERWISE) FOR: (a) ANY LOST PROFITS, LOST BUSINESS OPPORTUNITIES, LOST DATA, OR SPECIAL, INCIDENTAL, CONSEQUENTIAL EXEMPLARY OR PUNITIVE DAMAGES, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES OR SUCH DAMAGES OR LOSSES WERE REASONABLY FORESEEABLE, OR (b) AN AMOUNT THAT EXCEEDS THE TOTAL FEES PAYABLE TO TOTAL CAE FOR THE HPC SOLUTIONS, OR SERVICE GIVING RISE TO SUCH LIABILITY. THESE LIMITATIONS WILL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY SPECIFIED IN THIS AGREEMENT. MULTIPLE CLAIMS SHALL NOT EXPAND THE LIMITATIONS SPECIFIED IN THIS SECTION 12.

13. Security.

a. Hardware (loaded as required with required Software) shall be shipped with TOTALCAE standard default security and other configurations with respect to operating systems ("OS"), firmware and design architecture, as determined by TOTALCAE in its sole discretion. Hardware and Software will be fully patched for any known security vulnerabilities at time of shipment.

b. Hardware and Software shall be installed at Customer's site in accordance with TOTALCAE standards, and integrated with Customer set up requirements.

c. Customer is responsible for all debugging required by or resulting from customer requested configurations to Hardware or Software; TOTALCAE will provide debugging services by separate SOW at customary professional services hourly rates.

d. TOTALCAE shall not be responsible for applying or installing any new releases, patches or security updates. TOTALCAE will deliver Customer notice of new releases, which may include patches and security updates via TOTALCAE's designated Customer listserv; Customer shall be solely responsible for requesting patches and security updates via a TOTALCAE help desk request: <https://support.totalcae.com>. TOTALCAE shall use commercially reasonable efforts to respond to such requests and implement releases, patches and security updates, EXPRESSLY CONDITIONED UPON CUSTOMER'S PROVIDING TOTALCAE TIMELY ACCESS TO ITS SYSTEM TO DO SO.

e. Customer is solely responsible for obtaining, operating and maintaining at its expense, adequate storage/backup for its system and data. Customer warrants and represents to TOTALCAE that during the term of this Agreement it has and will operate maintain, monitor and test its storage/backup system OR subscribe to TOTALCAE's STORAGE CAMEL backup service. CUSTOMER ACKNOWLEDGES THAT CUSTOMER DATA MAY BE PERIODICALLY DELETED BY TOTALCAE AND **IMPORTANT CUSTOMER DATA SHOULD NEVER BE STORED IN THE TOTALCAE CLUSTER.**

e. Other responsibilities of the parties for Security are set forth in Schedule C, which is expressly incorporated by reference. TOTALCAE's responsibility for providing security-related services is conditioned upon Customer's authorizing and providing TOTALCAE timely and adequate access to Customer's computing environment to provide such security services.

15. General.

a. Export Controls. The HPC Solutions may be subject to "US Export Control Laws," which include the Export Administration Regulations ("EAR"), the International Traffic in Arms Regulations ("ITAR"), as well as the economic and trade sanctions administered and enforced by the US Office of Foreign Assets Control (OFAC). Customer shall comply with all US Export Control Laws. Customer may not, and may not permit any third-parties to, directly or indirectly, export, re-export or release any HPC Solutions to any person, firm or entity, to any country, or for any end-use prohibited by US Export Control Laws.

Customer shall obtain any necessary export license or government approval prior to exporting, re-exporting or releasing HPC Solutions. Customer shall provide prior written notice of the need to comply with US Export Control Laws to any person, firm or entity which Customer has reason to believe is obtaining the HPC Solutions from Customer with the intent to export. Customer is responsible for any breach of this Section 12(a) by its parent, affiliates, employees, officers, directors, customers, agents, distributors, resellers or vendors, as well as such parties designated by its successors and permitted assignees.

b. U.S. Government End Users. The HPC Solutions and Documentation are "commercial items," as that term is defined in 48 C.F.R. 2.101, consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212.

Consistent with 48 C.F.R. 12.212 and 48 C.F.R.227.7202-1 through 227.729204, the HPC Solutions and Documentation are being licensed to U.S. Government end users only as “commercial items” and with only those rights as are granted to all other end users pursuant to the terms and conditions of this Agreement.

c. Disclaimers and other Provisions regarding U.S. Government Regulations.

i. TOTALCAE disclaims compliance with the Defense Federal Acquisition Regulation Supplement (“DFARS”), Federal Risk and Authorization Management Program (“FedRAMP”), ITAR, and EAR; Customer is solely responsible for such compliance (See Matrix, Schedule C);

ii. TOTALCAE disclaims Hardware and Software compatibility with DISA STIGs; Customer is solely responsible for security assessment of any required deviations from DISA STIG configurations.

iii. Unless otherwise expressly stated in a TOTALCAE quotation or Customer order, all orders are for commercial, non-governmental use only. Any proposed governmental use is subject to TOTALCAE review and consent, and pricing and other adjustments, including possible rejection or termination.

d. Governing Law and Jurisdiction. This Agreement, and the rights and duties of the parties arising from this Agreement, shall be governed by, construed, and enforced in accordance with the laws of the State of Michigan, excluding its conflicts-of-law principles. The sole and exclusive jurisdiction and venue for actions arising under this Agreement shall be state and federal courts in Washtenaw County, Michigan, and the parties agree to service of process in accordance with the rules of such courts.

e. Assignment. Neither party may assign this Agreement without prior written consent of the other party, provided however either party may do so to a successor-in-interest pursuant to a merger, acquisition, or sale of all or substantially all of its business and/or assets. Any assignment in violation of this Section 13d shall be void. Subject to the foregoing, all rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of and be enforceable by and against the successors and permitted assigns.

f. Equitable Relief/Attorney Fees. The parties agree that a material breach of this Agreement adversely affecting TOTALCAE’s or its suppliers’ intellectual property rights in the HPC Solutions or either party’s Confidential Information may cause irreparable injury to such party for which monetary damages would be an inadequate remedy and the non-breaching party shall be entitled to equitable relief (without a requirement to post a bond) in addition to any remedies it may have under this Agreement or at law. In addition, the substantially prevailing party in any dispute involving this Agreement shall be entitled to recover its attorney fees and expenses.

f. Publicity. TOTALCAE may publicly disclose that Customer is a customer of TOTALCAE and a licensee of the HPC Solutions, including in a list of TOTALCAE customers and other promotional materials.

g. Independent Contractor. The parties are independent contractors. This Agreement shall not establish any relationship of partnership, joint venture, employment, franchise or agency between the parties.

h. Waiver & Severability; Amendments. The failure of either party to enforce any provision of this Agreement shall not constitute a waiver of any other provision or any subsequent breach. If any provision of this Agreement is held to be illegal, invalid or unenforceable, the provision will be enforced to the maximum extent permissible, and the remaining provisions of this Agreement will remain in full force and effect. This Agreement may only be amended, or any term or condition set forth herein waived, by written consent of both parties.

i. Notices. Except as otherwise provided in this Agreement, all legal notices to Customer will be given in writing to any Customer address listed on the applicable Order. All legal notices to TOTALCAE will be given in writing to: Hiperlogic, LLC d/b/a TOTALCAE, 47647 Pine Creek, Northville, Michigan, U.S.A., Attention: Rod Mach or emailed to rod@totalcae.com. Such notices will be effective (a) when personally delivered, (b) on the reported delivery date if sent by a recognized international or overnight courier or by email, or (c) five business days after being sent by registered or certified mail. Purchase orders, invoices, and other documents relating to order processing and payment are not legal notices and may be delivered electronically in accordance with TOTALCAE's and Customer's standard ordering procedures.

j. Entire Agreement. This Agreement consists of these terms of use, and the attached schedule(s), which are incorporated by reference. This Agreement constitutes the entire agreement between the parties with respect to its subject matter and supersedes and cancels all prior agreements, representations, communications, and understandings of the parties, written or oral, relating to such subject matter, and is not intended to confer upon any person other than the signatories below any rights or remedies. The headings of sections of this Agreement are for convenience and are not for use in interpreting this Agreement.

k. Electronic Signatures. The parties agree to use electronic signatures and agree that any electronic signatures will be legally valid, binding and enforceable.

TOTALCAE
Schedule A: Support & Maintenance Agreement

If Customer has paid fees to obtain support and maintenance services, this Support and Maintenance Agreement (“SMA”) applies to such support and maintenance services.

1. Definitions .

- a. “Designated Support Contact” means the Customer employee appointed by Customer as its primary Customer contact with TOTALCAE for support services.
- b. “Incident” means when the HPC Solutions does not seem to materially perform in accordance with the specifications specified in the relevant Documentation.
- c. “Response” means when TOTALCAE support personnel have (i) triaged the Incident, (ii) contacted Customer, and (iii) begun initial troubleshooting on the Incident.

2. Support Services .

a. Support and Trouble Tickets. During the License Term, TOTALCAE shall use commercially reasonable efforts to provide support services to Customer, as described below. The Designated Support Contact may report Incidents to TOTALCAE through TOTALCAE’s Support Portal (available at <https://support/totalcae.com>) and thereafter, the parties may cooperate to address the Incidents via email, telephone or the Support Portal. TOTALCAE shall provide Customer with a trouble ticket number that Customer can use to track the status of Incidents. TOTALCAE may close the trouble ticket without further responsibility if Customer fails to respond to Customer’s request for additional information or to confirm that the trouble ticket is resolved within ten (10) days of TOTALCAE’s request or receipt of a patch or workaround (as applicable). Support services for the HPC Solutions are available during business hours, which are 9 am-5 pm ET, Monday through Friday (excluding holidays).

b. Initial Response Times for Technical Support Issues. TOTALCAE shall provide Responses for Incidents that have been properly reported through the Support Portal in accordance with the table below:

Severity Level	Description	Initial Response Time for Standard SaaS Subscription
1	A severity one (1) issue is a catastrophic production problem which may severely impact Customer's production systems or that causes Customer's production systems to go down or	2 hours

Severity Level	Description	Initial Response Time for Standard SaaS Subscription
	not function. There may be a loss of production data and no procedural work around exists.	
2	A severity two (2) issue is an issue where Customer's production systems are functioning but does so in a severely reduced capacity. The situation causes significant impact to portions of Customer's business operations and productivity. The systems are exposed to potential loss or interruption of service.	6 business hours, 9-5 ET, M-F
3	A severity three (3) issue is a medium-to-low impact problem which involves partial non-critical functionality loss. This issue impairs some operations but allows Customer to continue to function. This may be a minor issue with limited/no loss of functionality or impact to Customer's operation and there is an easy circumvention or avoidance by the end user. This includes errors in Documentation.	1 business day
4	A severity four (4) issue is for a general usage question or recommendation for a future product enhancement or modification. There is no impact on the quality, performance or functionality of the product.	5 business days

b. Limitations. TOTALCAE shall have no obligations under this Section 2: (i) if the Incident as determined by TOTALCAE is caused by hardware or a component not obtained from TOTALCAE; (ii) if the Incident as determined by TOTALCAE is caused by Customer's engineering solver or a third party application; (iii) if the Incident cannot be reproduced by TOTALCAE, (iv) if the HPC Solutions has been modified or repaired, except by or at the direction of TOTALCAE, (v) if the HPC Solutions has not been installed, used or maintained in accordance with the Documentation, (vi) if the HPC Solutions is used on hardware, software or other equipment that deviates from TOTALCAE's recommendations made in the then current Documentation, (vii) if Customer does not permit TOTALCAE timely access to the logs or to perform remote troubleshooting sessions on the affected server or component, as reasonably requested by TOTALCAE, and/or (viii) for information or data contained in, stored on or integrated, with any HPC Solutions.

3. Maintenance Services. During the License Term, TOTALCAE shall make available to Customer all Updates to the extent generally released to other TOTALCAE customers that purchased the same maintenance services. Such maintenance services shall apply only to the current shipping release of the HPC Solutions and, for security fixes only, the immediately prior release.

4. General. TOTALCAE may revise the terms of this SMA, provided that: (a) such revision is made to its standard SMA terms made generally available to other customers, (b) TOTALCAE provides written/email notice of such revision at least sixty (60) days prior to the expiration of the then-current Support & Maintenance Term, (c) such revisions only apply to renewal terms, and (d) renewal is subject to mutual agreement. Any delay or failure in the performance by TOTALCAE (including in HPC Solutions availability) shall be excused if and to the extent caused by a cause or event that is not reasonably foreseeable or otherwise caused by or under the control of TOTALCAE, including but not limited to acts of God (including but not limited to fire, flood, earthquake, storm, hurricane or other natural disaster), war, hostilities (whether war be declared or not), invasion, act of foreign enemies, mobilization, requisition or embargo, rebellion, revolution, insurrection, military or usurped power, civil war, acts or threats of terrorism, riots, strikes or labor disputes (excluding by TOTALCAE employees) or any internet unavailability, interference, delay, reduction in speed or functionality or other internet access or outage problem or cyber event experienced by Customer, TOTALCAE or any of their respective internet service providers (“Force Majeure”).

TOTAL CAE
Schedule B: Hardware Products

1. **PRICES:** Prices for the Hardware Products shall be those set forth in TOTALCAE's price lists or in written quotations in effect at the time of shipment. Prices are subject to change without notice. Written quotations shall expire within thirty (30) days from the date of their issuance unless terminated earlier by TOTALCAE upon notice to Customer. Prices do not include any taxes imposed by any governmental authority whatsoever, which taxes shall be paid by Customer in accordance with Section 4 of the Agreement.
2. **ADDITIONAL COSTS/EXPENSES:** Customer shall pay all added costs and expenses incurred by TOTALCAE as a result of delays in receiving receipt of details, specifications, and other pertinent information from Customer or because of changes requested by Customer.
3. **SHIPMENT/DELIVERY:** All deliveries shall be FOB TOTALCAE's facility, Ann Arbor, Michigan or such dropship or other location as specified by TOTALCAE. Methods and routes of shipment, unless TOTALCAE specifies in writing otherwise, shall be accepted as chosen by TOTALCAE in TOTALCAE's sole discretion. Customer shall pay all costs of shipment. Delivery to the carrier shall constitute delivery and passage of title to Customer, and risk of loss shall pass to Customer concurrently with passage of title. TOTALCAE will use reasonable diligence to meet scheduled shipment dates and times. Such dates and times are the best possible estimates, and not guarantees, of when the Goods will actually be shipped. In no event shall TOTALCAE be liable for any losses or damages of any kind due to delays in shipment, nor may Customer cancel its contract because of any such delay. TOTALCAE reserves the right to make partial deliveries and Customer will accept delivery and pay for the Hardware Products delivered. A delayed delivery of any part of an order does not entitle Customer to cancel other deliveries. TOTALCAE reserves the right to substitute, and Customer shall accept, equivalent or better hardware as necessary or appropriate in TOTALCAE'S sole discretion.
4. **CANCELLATION:** Cancellations of orders, once placed, are not permitted.
5. **RETURN OF GOODS:** The Hardware Products are not returnable or exchangeable.
6. **FORCE MAJEURE:** TOTALCAE shall not be liable for any delay in shipment, failure to deliver, or any other nonperformance directly or indirectly resulting from or contributed to by any cause or circumstance beyond TOTALCAE's control, including, without limitation, force majeure, man-made or natural disasters, accidents to TOTALCAE's plant or equipment, riots, wars or national emergencies, labor disputes of every kind however caused, embargoes, non-delivery by suppliers, inability to obtain supplies through normal sources of supplies, delays of carriers or postal authorities, acts or omissions of Customer, operational disruptions, criminal acts, governmental restrictions, prohibitions, or diversions. In such event, TOTALCAE's time for performance under this Agreement shall be extended for a period of time not less than the period of such delay, or at TOTALCAE's option, TOTALCAE may rescind

the Hardware Product Order upon ten (10) days' written notice to Customer. Furthermore, TOTAL CAE may allocate its production and deliveries among its customers.

7. **USE OF HARDWARE PRODUCTS:** Customer shall comply with the manufacturer's or supplier's specifications. Hardware Products are not authorized for use in critical safety or other applications where a failure may reasonably be expected to result in personal injury, loss of life, or serious property damage. If Customer uses or sells the Hardware Products for use in any such applications or fails to comply with the manufacturer's specifications, Customer acknowledges that such use, sale, or non-compliance is at Customer's sole risk.

8. **HARDWARE PRODUCT INFORMATION.** Hardware Product information (for example, statements or advice (technical or otherwise) advertisement content, and information related to a Hardware Product's specifications, features, export/import control classifications, uses or conformance with legal or other requirements) is provided by TOTALCAE on an "AS IS" basis and does not form a part of the properties of the Hardware Product. TOTALCAE makes no representation as to the accuracy or completeness of the Hardware Product information, and DISCLAIMS ALL REPRESENTATIONS, WARRANTIES AND LIABILITIES UNDER ANY THEORY WITH RESPECT TO THE HARDWARE PRODUCT INFORMATION. TOTALCAE recommends Customer validate any Hardware Product information before using or acting on such information. All Hardware Product information is subject to change without notice. TOTALCAE is not responsible for typographical or other errors or omissions in Hardware Product information.

9. **UNAVAILABILITY OF PARTS/MATERIALS:** TOTALCAE shall not be liable for any loss or damage caused by the unavailability of parts or materials.

10. **SECURITY INTEREST:** Until the full purchase price has been paid, TOTAL CAE reserves a Purchase Money Security Interest under the Uniform Commercial Code (the "UCC") in the Hardware Products and in all proceeds thereof. Customer shall execute such documents as TOTALCAE may require, including, but not limited to, one or more Financing Statements. Customer agrees and hereby appoints TOTALCAE as its attorney-in-fact to do, at TOTALCAE's option, all acts and things TOTAL CAE may deem desirable to perfect and continue to perfect the Purchase Money Security Interest granted hereby, including TOTALCAE's authority to file Financing Statements naming Customer as debtor and TOTALCAE as secured party without Customer's signature in those states where such filing are permitted, and to sign Customer's name thereto where required. At TOTALCAE's option, there shall be no delivery of any of the Hardware Products ordered hereunder until all documents necessary to perfect the Purchase Money Security Interest have been executed to TOTALCAE's satisfaction. All costs and expenses of TOTALCAE, including attorneys' fees for the preparation and recordation of documents deemed necessary and appropriate to establish and perfect the Purchase Money Security Interest, shall be Customer's responsibility and shall be immediately payable by Customer upon receipt of TOTALCAE's invoice for same. This Purchase Money Security Interest is in addition to and not in lieu of any security interest of TOTALCAE under Article 2 of the UCC.

11. **INSTALLATION:** Unless otherwise agreed in writing, the Hardware Products shall be installed by and at the expense of Customer.

12. **HARDWARE PRODUCT SUPPORT:** TOTALCAE will work with Customer to determine whether and to what extent Hardware Product failure or other performance issue is involved and coordinate contact with hardware vendor for warranty/maintenance as necessary. TOTALCAE will

notify Customer regarding unreliable, unstable or problematic hardware. **IF TOTALCAE RECOMMENDS HARDWARE REPLACEMENT, CUSTOMER'S FAILURE TO REPLACE HARDWARE MAY RESULT IN ITS BEING REMOVED FROM COVERAGE UNDER THE SAAS TERMS OF USE.**

ALL HARDWARE (INCLUDING PURCHASED HARDWARE PRODUCTS) WILL BE STANDARDIZED BY TOTALCAE. NO MODIFICATIONS TO HARDWARE SHALL BE MADE BY ANYONE OTHER THAN TOTALCAE AUTHORIZED PERSONNEL.

TOTALCAE RESERVES THE RIGHT TO BILL FOR LABOR AND PARTS IF TOTALCAE IS REQUESTED BY CUSTOMER TO CORRECT A CLUSTER FAILURE TOTALCAE DETERMINES HAS BEEN CAUSED BY ANY OF THE CONDITIONS DESCRIBED IN THE FOLLOWING PARAGRAPH 13, ANY EVENTS DESCRIBED IN PARAGRAPH 6 (FORCE MAJEURE), OR SIMILAR EVENTS OR CAUSES.

13. **SUPPORT EXCLUSIONS: TOTAL CAE will not provide support or services for any of the following, except by separate SOW on a time and materials basis:**

- a. Parts and labor for Hardware Product not under vendor warranty or maintenance contract;
- b. Greenfield installations of cluster nodes, solver or other technology not currently part of cluster or covered by existing TOTALCAE agreement;
- c. Third-party hardware;
- d. Hardware backup or data recovery;
- e. Installation, support or debugging of desktop PCs or workstations;
- f. Repair of bugs in user models or CAE solvers;
- g. Unavailability of or interference in public networks, failure of air conditioning or power sources or other facility, utility or similar problems;
- h. Major OS upgrades or complete system reloads;
- i. System, application or solver items not specifically identified in the SAAS Terms and Conditions.

14. **OTHER APPLICABLE TERMS AND CONDITIONS, INCLUDING WARRANTY PROVISIONS AND LIMITATIONS OF LIABILITY, ARE CONTAINED IN THE HPC SOLUTIONS TERMS OF SERVICE.**

TOTALCAE
Schedule C: Support Matrix

Support Matrix Key:

R	Responsible means the Party who does the work to complete the task.
A	Accountable means the Party ultimately answerable for the correct and thorough completion of the deliverable or task, who ensures the prerequisites of the task are met, and who delegates the work to those responsible.
C	Consulted means the Party whose opinions are sought and with whom there is two-way communication.
I	Informed means that Party which is kept up-to-date by the other Party on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication.

#1 HPC Solutions installed on-premises on TotalCAE supplied hardware with HPC cluster managed by TOTALCAE (On Premises Customer):

	Customer	TotalCAE
Application Support		
Install	I	R, A
Configuration	I	R, A
Upgrade	I	R, A
Patching / Upgrades (after request initiated)	I	R, C
Support	I	R, A
TotalCAE Platform Support		
Release Notes Production	I	R, A
Release Notes Review	R, A	
User and Data Management Support		
TotalCAE Platform Upgrade Request	R, A	C, I
User Management	R, A	
Data Access Control Lists	R, A	C
OS Support		
Security (including customer owned tool installation)	R, A	C, I
User Management	R, A	C, I
Patching	R, A	C, I
Troubleshooting	I	R, A
Backups	R, A	C, I

Hardening of OS (basic documentation provided by TotalCAE)	R, A	C, I
Incident Response	R, A	C, I
Hardware		
Repair or replace hardware components	C,I	R, A
Updating Firmware If Required	I	R,A
Install or replace HPC nodes	C,I	R, A
Hardening of firmware	R,A	C, I
Network Support		
Firewall Management	R,A	C, I

#2 HPC Solutions installed on-premises on Customer owned/leased hardware with HPC cluster managed by TotalCAE (On Premises Customer):

	Customer	TotalCAE
Application Support		
Install	I	R, A
Configuration	I	R, A
Upgrade	I	R, A
Patching / Upgrades (after request initiated)	I	R, C
Support	I	R, A
TotalCAE Platform Support		
Release Notes Production	I	R, A
Release Notes Review	R, A	
TotalCAE Platform Upgrade Request	R, A	C, I
User and Data Management Support		
User Management	R, A	
Data Access Control Lists	R, A	C
OS Support		
Security (including customer owned security tools installation)	R, A	C, I
User Management	R, A	C,I
Patching	R, A	C,I
Troubleshooting	I	R, A
Backups	R, A	C,I
Hardening of OS (basic documentation provided by TotalCAE)	R, A	C, I
Incident Response	R, A	C, I
Hardware		
Repair or replace hardware components.	R,A	C, I
Updating Firmware If Required.	R,A	C, I
Install or replace HPC nodes.	R,A	C, I

Hardening of firmware.	R,A	C, I
Network Support		
Firewall Management	R,A	C, I

#3 HPC Solutions as Cloud SaaS hosted and managed by TotalCAE (TOTALCAE Hosted Cloud Customer):

	Customer	TotalCAE
Application Support		
Install	I	R, A
Configuration	I	R, A
Upgrade	I	R, A
Patching / Upgrades	I	R, C
Support	I	R, A
TotalCAE Platform Support		
Release Notes Production	I	R,A
Release Notes Review	R, A	
Platform Upgrade Request?	C,I	R,A
User and Data Management Support		
User Management	R,A	I, C
Data Access Control Lists	R,A	C
OS Support		
Security	I	R, A
User Management	R, A	I
Patching	I	R, A
Troubleshooting	I	R, A
Backups (optional service)	I	R, A
Incident Response (TotalCAE Scope)	I	R, A
Cloud Hardware		
Repair or replace hardware components	Not Applicable	Not Applicable
Updating Firmware If Required	Not Applicable	Not Applicable
Install or replace HPC nodes	I	R, A
Hardening of firmware	Not Applicable	Not Applicable
Network Support		
Firewall Management (SaaS)	C, I	R,A

#4 HPC Solutions as Cloud SaaS hosted in Customer Subscription and managed by TOTALCAE (TOTALCAE Managed Cloud Customer):

	Customer	TotalCAE

Application Support		
Install	I	R, A
Configuration	I	R, A
Upgrade	I	R, A
Patching / Upgrades	I	R, C
Support	I	R, A
TotalCAE Platform Support		
Release Notes Production	I	R,A
Release Notes Review	R, A	
Platform Upgrade Request?	R,A	I,C
User and Data Management Support		
User Management	R,A	I
Data Access Control Lists	R,A	C
OS Support		
Security	R,A	I
User Management	R, A	I
Patching	R,A	I
Troubleshooting	I	R, A
Backups	R,A	I
Incident Response	R,A	I
Cloud Hardware		
Repair or replace hardware components	Not Applicable	Not Applicable
Updating Firmware If Required	Not Applicable	Not Applicable
Install or replace HPC nodes	I	R, A
Hardening of firmware	Not Applicable	Not Applicable
Network Support		
Firewall Management (SaaS)	R, A	I

#5 HPC Solutions installed on-premises on Customer owned/leased hardware with HPC cluster managed by Customer (HPC Solutions Customer):

	Customer	TotalCAE
Application Support		
Install	I	R, A
Configuration	I	R, A
Upgrade	I	R, A
Patching / Upgrades (after request initiated)	I	R, C
Support	I	R, A

TotalCAE Platform Support		
Release Notes Production	I	R, A
Release Notes Review	R, A	
TotalCAE Platform Upgrade Request	R, A	C, I
User and Data Management Support		
User Management	R, A	
Data Access Control Lists	R, A	C
OS Support		
Security (including customer owned security tools installation)	R, A	C, I
User Management	R, A	C, I
Patching	R, A	C, I
Troubleshooting	R, A	C, I
Backups	R, A	C, I
Hardening of OS (basic documentation provided by TotalCAE)	R, A	C, I
Incident Response	R, A	C, I
Hardware		
Repair or replace hardware components.	R, A	C, I
Updating Firmware If Required.	R, A	C, I
Install or replace HPC nodes.	R, A	C, I
Hardening of firmware.	R, A	C, I
Network Support		
Firewall Management	R, A	C, I

#6 HPC Solutions as Cloud SaaS hosted in Customer Subscription and managed by Customer (HPC Solutions Customer):

	Customer	TotalCAE
Application Support		
Install	I	R, A
Configuration	I	R, A
Upgrade	I	R, A
Patching / Upgrades	I	R, C
Support	I	R, A
TotalCAE Platform Support		
Release Notes Production	I	R, A
Release Notes Review	R, A	
Platform Upgrade Request?	R, A	I, C
User and Data Management Support		
User Management	R, A	I

Data Access Control Lists	R,A	C
OS Support		
Security	R,A	I
User Management	R, A	I
Patching	R,A	I
Troubleshooting	R,A	I
Backups	R,A	I
Incident Response	R,A	I
Cloud Hardware		
Repair or replace hardware components	Not Applicable	Not Applicable
Updating Firmware If Required	Not Applicable	Not Applicable
Install or replace HPC nodes	R,A	I
Hardening of firmware	Not Applicable	Not Applicable
Network Support		
Firewall Management (SaaS)	R, A	I