APPENDIX 1 SUBSCRIPTION SERVICES



Red Hat sells subscriptions that entitle you to receive Red Hat services and/or Software during the period of the subscription (generally, one or three years). This Appendix to the Order Form describes the "Subscription Services" that Red Hat provides for:

- Software product offerings (these subscriptions are called "Software Subscriptions");
- Support and maintenance services offerings (these subscriptions are called "Support Subscriptions"); and
- Software delivery and management services offerings (these subscriptions are called "Management Subscriptions").

The Exhibits to this Appendix provide additional terms concerning the Subscription Services. Whether you purchase Subscription Services from us or though one of our authorized Business Partners, we agree to provide you with the Subscription Services on the terms described in this Appendix, which includes the Exhibits and documents referred to in this Appendix (together, the "Appendix"). In exchange, you agree to comply with the terms of the Agreement, including this Appendix.

When we use a capitalized term in this Appendix without defining it, the term has the meaning defined in the Agreement to which this Appendix applies, such as the Red Hat Enterprise Agreement. In the event of a conflict, inconsistency or difference between this Appendix and an Exhibit to this Appendix, the terms of the Exhibit control.

1. Subscription Services - An Overview

- 1.1 Subscription Units. We charge you a fee for our Subscription Services based on the total number of Units of Software or other Red Hat Products that you deploy, install, use or execute (as described in more detail in Tables 1.4, 1.5 and 1.6 below and elsewhere in the Appendix). For example, Software Subscriptions for Red Hat Enterprise Linux Server are priced based on the number and other characteristics of Systems, Virtual Nodes or Physical Nodes (e.g. Socket-pairs, Virtual Guests, etc.) on which you install or use the Software. Software Subscriptions for Red Hat JBoss Enterprise Application Platform are priced based on the number of Cores running that Software, in a range called a Core Band. "Red Hat Products" refers collectively to the Software Subscriptions, Support Subscriptions and Management Subscriptions listed in Tables 1.4, 1.5 and 1.6. Note that Red Hat Products do not include generally available open source projects such as www.wildfly.org, www.jboss.org, www.fedoraproject.org, www.gluster.org, www.guster.org, www
- Use of Software and Subscription Services. While you have subscriptions entitling you to receive Subscription Services for a Red Hat Product, you are required to purchase Subscription Services in a quantity equal to the total number of Units of that Red Hat Product (including variants or components thereof). In addition, if you are using Subscription Services to support or maintain a Red Hat Product and/or non-Red Hat Product, then you are required to purchase Subscription Services for each instance of such Red Hat Product and/or non-Red Hat Product for which you use Subscription Services. The Agreement (including pricing) is premised on our understanding that you will use the Subscription Services and Software only for your internal use (which includes Affiliates). You agree not to use Software Subscriptions with higher support service levels (e.g. Standard and/or Premium) to provide such higher support levels to Units with Subscriptions that include lower support levels (e.g. Self-support and/or Standard), unless you report and pay for the higher support service levels on such Units. You may migrate from one Unit of a given Software Subscription to another Unit with the same Subscription Services characteristics (such as from one on-premise System or Physical Node to another on-premise System or Physical Node) without the purchase of additional Software Subscriptions, provided that you do not increase the quantity of Units or other Software Subscription characteristics (such as the number of Socket-pairs, Virtual Guests, vCPUs or Managed Nodes). A Software Subscription provides you with ongoing access to a variety of services for your personal (internal) use. Accordingly, providing our services to, or using for the benefit of, a third party (for example, using Subscription Services to provide hosting services, managed services, Internet service provider (ISP) services, or third party access to or use of the Subscription Services) is a material breach of the Agreement. The foregoing sentence is not intended to limit your internal use of the Software to run a web site and/or to offer your own software as a service, provided such web site or service (a) does not include a distribution, sale or resale of any of the Subscription Services and (b) provides as the primary component of the web site or service a material value added application other than the Software and/or Subscription Services. The Subscription Services may be used under the terms of this Appendix by third parties acting on your behalf, such as contractors, subcontractors or outsourcing vendors provided (i) you remain responsible for all of your obligations under the Agreement and this Appendix and for the activities and omissions of the third parties and (ii) you obtain Red Hat's written consent before you migrate your Software Subscriptions off of your premises or, in the case of a migration to a third party cloud or hosting provider, you are qualified for the Red Hat Cloud Access program and agree to the terms of Red Hat's Cloud Access program as set forth in Exhibit 1.I. Any unauthorized use of the Subscription Services is a material breach of the Agreement, such as (a) only purchasing or renewing Subscription Services based on some, but not all, of the total number of Units of Software or other Red Hat Products, (b) providing Software Access or Software Maintenance (each defined below) to third parties, (c) using Software Access, Software Maintenance, Pre-Production Support, Production Support and/or Development Support (each defined below) to provide support to third parties, (d) using Subscription Services in connection with any redistribution of Software and/or (e) using Subscription Services to support or maintain any non-Red Hat Software products without purchasing Subscription Services for each instance of such non-Red Hat Product for which you use Subscription Services. For the purposes of this paragraph (for example, in calculating the total number of Units of Software), Software includes versions or copies with the Red Hat trademark(s) and/or logo file(s) removed. The licenses that are applicable to the individual open source software packages are perpetual (subject to your compliance with their terms), but the other benefits of a Software Subscription will expire if not renewed. This Agreement establishes the rights and obligations associated with Red Hat Products and is not intended to limit your rights to software code under the terms of an open source license.

1.3 Subscription Start Date. Unless otherwise agreed in an Order Form, the Subscription Services will begin on the date you purchase the Subscription Services (please note that the foregoing does not limit your obligation to pay for Subscription Services that you previously used but for which you have not paid).

1.4 Software Subscriptions.

Benefits of a Software Subscription. For each Software Subscription that you purchase, Red Hat provides you one or more of the following benefits:

- Software Access: Access to the Software.
- Software Maintenance: Access to updates, upgrades, corrections, security advisories and bug fixes for the Software, if and when available.
- Support: Access to Red Hat support for issues relating to Software as described below.
- Open Source Assurance: Software Subscription purchases under this Appendix may entitle you to participate in Red Hat's Open Source Assurance Program subject to a separate agreement, which can be viewed at www.redhat.com/legal/open-source-assurance-agreement.html.

Descriptions of Red Hat Software Subscriptions. Table 1.4 below lists the Software Subscriptions offered by Red Hat and the Unit descriptions that are used to measure your use of each Software Subscription. The End User License Agreement(s) that govern(s) your use of the Software is/are located at www.redhat.com/licenses/EULAs (note that for certain Red Hat Products multiple EULAs apply). The Exhibits listed in Table 1.4 contain additional information concerning the scope of the Software Subscriptions and how Red Hat provides Subscription Services to you.

Table 1.4

Software Subscription	Unit Description (used to measure your use of Software Subscriptions)	Exhibit Containing Additional Terms
Red Hat Enterprise Linux Server (Physical or Virtual Nodes) Red Hat Enterprise Linux for SAP HANA Red Hat Enterprise Linux Server Add-Ons: High Availability Load Balancer Resilient Storage Scalable File System Smart Management Extended Update Support Extended Life Cycle Support	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable: OR Virtual Node: an instance of the Software executed, in whole or in part, on a virtual machine or container.	1.A
Red Hat Insights Red Hat Enterprise Linux for Virtual Datacenters Red Hat Enterprise Linux for Hyperscale Red Hat Enterprise Virtualization for Power Red Hat Enterprise Linux Server Entry Level	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable.	1.A
Red Hat Enterprise Linux Server Red Hat Enterprise Linux for HPC Compute Nodes Red Hat Enterprise Linux for HPC Head Nodes Red Hat Enterprise Linux for Grid Nodes Red Hat Enterprise Linux for PRIMEQUEST Red Hat Enterprise Linux for SAP	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable; OR VCPU: a physical CPU, in whole or in part, which is assigned to a virtual machine or container on which you install or execute all or a portion of the Software. Note: Additional terms regarding virtualization, disaster recovery, academic offerings and supported use cases, which may affect the types or quantities of	1.A

Software Subscription	Unit Description (used to measure your use of Software Subscriptions)	Exhibit Containing Additional Terms
Applications	Software Subscription you purchase, are contained in Exhibit 1.A.	
Red Hat Enterprise Linux Server Add- Ons: High Availability Load Balancer Resilient Storage Scalable File System Smart Management Extended Update Support Extended Life Cycle Support Red Hat Insights		
Red Hat Enterprise Linux Desktop	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed	1.A
Red Hat Enterprise Linux Workstation	on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	
Red Hat Enterprise Linux for IBM System z	System z IFL: a System z IFL (Integrated Facility for Linux) is a mainframe CPU dedicated to Linux workloads.	1.A
Red Hat Enterprise Linux for Power, BE	Power IFL: a Power IFL (Integrated Facility for Linux) is processor core on an	
Red Hat Enterprise Linux for Power, LE	IBM Power system that is activated, contains or executes all or a portion of the Software.	1.A
Red Hat Enterprise Linux for Real Time		
Red Hat Enterprise Virtualization		
Red Hat Enterprise Linux with Smart Virtualization	Physical Node: a physical system on which you install or execute all or a	1.A
Red Hat Enterprise Linux for Power with Smart Virtualization	portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable.	T.A
Red Hat Enterprise Linux with Smart Virtualization for SAP Applications		
Red Hat Enterprise Linux Academic Server		
Red Hat Enterprise Linux Academic Desktop	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container,	1.A
Red Hat Enterprise Linux Academic Workstation	blade, node, partition, appliance or engine, as applicable.	
Red Hat Enterprise Linux Academic Site Subscription	Full Time Equivalent or FTE: the total number of (a) full time faculty, (b) one third of the part time faculty, (c) the full time staff and (d) one half of the part time	1.A
Red Hat Infrastructure for Academic Institutions - Site Subscription	staff.	I.Λ
Red Hat Enterprise Linux Developer Suite	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	1.C

Software Subscription	Unit Description (used to measure your use of Software Subscriptions)	Exhibit Containing Additional Terms
Red Hat JBoss Enterprise Application Platform		
Red Hat JBoss Web Server		
Red Hat JBoss Web Server Plus		
Red Hat JBoss Fuse Service Works		
Red Hat JBoss Data Virtualization		
Red Hat JBoss Fuse	Core Band: a group of processing cores (16 or 64), where a single "Core" is (a)	
Red Hat JBoss A-MQ	a physical processing core located in a CPU or (b) a virtual processing core	1.B
Red Hat JBoss Portal	within a virtual machine or supporting a container, in each case, that contains or executes the Software running for Production Purposes.	1.5
Red Hat JBoss BPM Suite	Should all contract and many of the contract and contract	
Red Hat JBoss BRMS plus BPM Suite		
Red Hat JBoss BRMS		
Red Hat JBoss Data Grid		
Red Hat JBoss Middleware add-on option: Extended Life Cycle Support		
Red Hat JBoss Fuse for OpenShift Container Platform		
Red Hat JBoss A-MQ for OpenShift Container Platform		
Red Hat JBoss Middleware for OpenShift Container Platform	Physical Node: a physical system on which you install or execute all or a portion of the Software, including, without limitation, a server, work station, laptop, blade, or other physical system, as applicable.	
Red Hat JBoss Enterprise Application Platform for OpenShift Container Platform	OR	1.B
Red Hat JBoss BRMS for OpenShift Container Platform	Virtual Guest: an instance of the Software that is executed, in whole or in part, on a virtual machine or container.	
Red Hat JBoss Data Grid for OpenShift Container Platform		
Red Hat JBoss Developer Studio	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	1.C
Red Hat Gluster Storage	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station,	
Red Hat Ceph Storage	laptop, blade or other physical system, as applicable.	
Red Hat Ceph Storage Pre-Production	OR	1.D
Red Hat Gluster Storage Pre- Production	Storage Band: means an amount of Storage (measured in terabytes " TB " and/or petabytes " PB "), where " Storage " is the total capacity of storage available to each instance of the Software.	
Red Hat Gluster Storage for Public Cloud	Virtual Node: an instance of the Software executed, in whole or in part, on a virtual machine or container.	1.D, 1.I
Red Hat Gluster Storage for Hybrid Cloud	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable; and Virtual Guest: an instance of the Software that is executed, in whole or in part, on a virtual machine or container.	1.D, 1.I

Software Subscription	Unit Description (used to measure your use of Software Subscriptions)	Exhibit Containing Additional Terms
Red Hat Gluster Storage for Red Hat OpenStack Platform	Physical Node: a physical system on which you install or execute all or a portion of the Software, including, without limitation, a server, work station, laptop, blade, or other physical system, as applicable.	1.A, 1.D
Red Hat OpenShift Container Platform(formerly known as OpenShift Enterprise)	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable;	1.B, 1.J
OpenShift Enterprise Broker	OR	1.0, 1.0
Infrastructure	Virtual Guest: an instance of the Software that is executed, in whole or in part, on a virtual machine or container.	
Red Hat OpenShift Container Platform for RHEL Container Platform for RHEL	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable.	1.B, 1.J
Red Hat Cloud Infrastructure	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable.	1.E, 1.H
Red Hat OpenStack Platform (formerly known as Red Hat Enterprise Linux OpenStack Platform)	Physical Node: a physical system on which you install or execute all or a portion of the Software, including, without limitation, a server, work station, laptop, blade, container or other physical system, as applicable.	1.A, 1.F
Red Hat OpenStack Platform for Atom	Physical Node: a physical system on which you install or execute all or a	
Red Hat Cloud Suite	portion of the Software, including, without limitation, a server, work station, laptop, blade, container or other physical system, as applicable.	1.E

1.5 Support Subscriptions. Table 1.5 below lists the Support Subscriptions offered by Red Hat and the Unit description that is used to measure your use of the Support Subscription(s). The End User License Agreement that governs your use of the Software is located at www.redhat.com/licenses/EULAs. The Exhibits listed in Table 1.5 contain additional information concerning the scope of the Support Subscriptions and how Red Hat provides Subscription Services to you.

Table 1.5

Support Subscription	Unit Description (used to measure your use of Support Subscriptions)	Exhibit Containing Additional Terms
Technical Account Management ("TAM") Service TAM Extension	Point of Contact: a Red Hat associate whom you are authorized to contact to request support for a particular team, geography or Red Hat product line.	1.G
Extended Update Support Red Hat Enterprise Linux Extended Life Cycle Support	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	1.G
Extended Update Support Red Hat Enterprise Linux Extended Life	Physical Node: a physical system on which you install or execute all or a portion of the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable:	1.G
Cycle Support	OR Virtual Node: an instance of the Software executed, in whole or in part, on a virtual machine or container.	
Red Hat JBoss Middleware Extended Life Cycle Support	Core Band: a group of processing cores (16 or 64), where a single " Core " is (a) a physical processing core located in a CPU or (b) a virtual processing core within a virtual machine or supporting a container, in each case, that contains or executes the Software running for Production Purposes.	1.G
Red Hat Enterprise Linux Developer Workstation Red Hat Enterprise Linux Developer	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	1.C

Support Subscription	Unit Description (used to measure your use of Support Subscriptions)	Exhibit Containing Additional Terms
Support		

Management Subscriptions. Table 1.6 below lists the Management Subscriptions offered by Red Hat and the Unit description that is used to measure your use of the Management Subscription(s). The End User License Agreement that governs your use of the Software is located at www.redhat.com/licenses/EULAs. The Exhibits listed in Table 1.6 contain additional information concerning the scope of the Management Subscriptions and how Red Hat provides Subscription Services to you.

Table 1.6

Management Subscription	Unit Description (used to measure your use of Management Subscriptions)	Exhibit Containing Additional Terms
Red Hat Satellite Server Red Hat Satellite Server Starter Pack	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable. If you install or use the optional embedded database, then you agree to comply with the terms located at www.redhat.com/licenses/satellite embedded.html for the embedded database.	1.H
Red Hat Satellite Proxy Red Hat Satellite Capsule	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	1.H
Red Hat Smart Management	Module: an entitlement to manage one System, Virtual Node or Physical Node.	1.H
Red Hat Directory Server	System: a system on which you install or execute all or a portion of the Software. A System includes each instance of the Software installed or executed on, without limitation, a server, work station, laptop, virtual machine, container, blade, node, partition, appliance or engine, as applicable.	
Red Hat CloudForms	Managed Node: a server, blade, container or virtual machine managed by the Software. Physical Node: a physical system managed by the Software including, without limitation, a server, work station, laptop, blade or other physical system, as applicable: OR Virtual Node: a virtual machine or container on a public cloud managed by the Software.	1.H
Ansible Tower	Managed Node: each Node managed by the Software. "Node" means each physical or virtual server, blade, host or container, regardless of the number of processors, cores or virtual cores included on such physical or virtual server, blade, host or container.	1.H

- 1.7 Software Subscription Lifecycle. During the life cycle of Red Hat Software, the scope of Software Maintenance and Support evolves and, after a number of years, we discontinue Software Maintenance and Support for older versions of Software. The details of the Software Maintenance and Production Support life cycle are set forth at https://access.redhat.com/support/policy/update_policies.html and, in certain instances in an Exhibit(s). If available, you may purchase Extended Update Support and/or Extended Life Cycle Support, as described in Exhibit 1.G, to extend your Subscription Services for certain versions of Software.
- 1.8 Red Hat Software Subscription Bundles. Red Hat offers combinations of Software Subscriptions with complimentary feature sets and price discounts ("Bundle(s)"). The basis of the fees for these Bundles is the combined use of such Software Subscriptions on a single Unit. When any of the combined Software Subscriptions are used independently from the Bundle, the fees for such independent usage will be at Red Hat's standard fees for the Software Subscription.
- 2. Production Support and Development Support Terms
- 2.1 Definitions.

"Development Purposes" means using the Software for the specific purpose of (a) individual developers writing software code, (b) single-user prototyping, quality assurance or testing and/or (c) demonstrating software or hardware that runs with or on the Software.

"**Production Purposes**" means using the Software (a) in a production environment, (b) generally using live data and/or applications for a purpose other than Development Purposes, (c) for multi-user prototyping, quality assurance and testing and/or (d) for backup instances.

"Supported Hardware" means the hardware and platforms that are listed at (i) https://hardware.redhat.com and http://www.redhat.com/resourcelibrary/articles/enterprise-linux-virtualization-support for Red Hat Enterprise Linux, OpenShift Container and Red Hat Enterprise Virtualization Subscriptions. http://www.jboss.com/products/platforms/application/supportedconfigurations/ for Red Hat JBoss Middleware Subscriptions, and (iii) https://access.redhat.com/knowledge/articles/66206 for Red Hat Gluster Storage Subscriptions, (iv) https://access.redhat.com/products/red-hat-ceph-storage for Red Hat Ceph Storage Subscriptions and (v) http://docs.ansible.com/ansibletower/latest/html/quickinstall/prepare.html#prerequisites-and-requirements for Ansible Tower Subscriptions.

"Evaluation Subscriptions" are Subscription Services provided for the sole purpose of evaluating the suitability of the Subscription Services for your future purchase from Red Hat or through one of our authorized Business Partners (**"Evaluation Purposes"**), and not for Production Purposes, Development Purposes or any other purpose.

"Support Contact(s)" is a person authorized by you to open support requests and/or contact Red Hat support personnel.

- 2.2 Use Cases. Subscription Services are provided for Software only when used for its supported purpose ("Use Case"). The Use Case determines which Subscription is required and what fees are charged. If you use or deploy the Software in a manner contrary to a supported Use Case, you are responsible for purchasing the appropriate Subscription(s) to cover such usage. For example, if you are using a Red Hat Enterprise Linux Desktop Subscription as a server, you are obligated to purchase a Red Hat Enterprise Linux Server Subscription.
- 2.3 Evaluations. By requesting an Evaluation Subscription, you represent that you will be using the Subscription Services for Evaluation Purposes only and you understand that Red Hat is relying on the accuracy of your representation in providing you with access to the Evaluation Subscription(s). If you use the Red Hat Evaluation Subscription(s) for any other purposes, you are in violation of this Agreement and are required to pay the applicable subscription fees in accordance with Sections 1.1 and 1.2 above, in addition to any and all other remedies available to Red Hat under applicable law. Examples of such violations include, but are not limited to, using the Subscription Services provided under an Evaluation Subscription for Production Purposes, offering support services to third parties, or complementing or supplementing third party support services with Subscription Services received through an Evaluation Subscription.
- **2.4 Support from a Business Partner.** Some clients obtain support for their Software Subscriptions from an authorized Red Hat Business Partner, in which case the Business Partner provides support to you and not Red Hat. Sections 2.5 2.8 apply to you only if you have purchased Subscription Services with Support provided by Red Hat. If you have purchased Subscription Services with support provided by a Business Partner, Sections 2.5 2.8 do not apply to you and you should work with your Business Partner to obtain support services.

2.5 Support from Red Hat.

"Development Support" consists of assistance with installation, usage, problem diagnosis and bug fixes for the applicable Software used for Development Purposes during specific Red Hat life cycle phases (as referenced in Section 1.7 above). Development Support also consists of advice on architecture, design, development and prototyping. Requests for deployment and maintenance assistance and/or assistance for Production Purposes are not included within the scope of Development Support, but rather are available on a consulting basis under the terms of a separate agreement.

"Production Support" consists of assistance with installation, application testing, usage, problem diagnosis and bug fixes for Software used for Production Purposes during specific Red Hat life cycle phases (as referenced in Section 1.7 above). Production Support does not include assistance with code development, system design, network design, architectural design, optimizations, tuning recommendations, development or implementation of security rules or policies, third party software made available with Red Hat Software (listed at www.redhat.com/licenses/thirdparty/eula.html), supplementary RHN channels and/or preview technologies.

Red Hat provides Support for the Red Hat Products that you purchase and does not provide Support for any underlying infrastructure or for any third party products that may be running on any servers, virtual machines or containers.

To access and use Support, you must provide Red Hat with sufficient information to validate your entitlement to the relevant Support. The scope of the Support is based on the level (for example, Self-support, Standard or Premium) and type of Subscription Services you purchased. Certain Support is provided only during Red Hat's local standard business hours.

2.6 Support Coverage. We do not provide Support for Software that (a) you (or a third party) have modified or recompiled, (b) is running on hardware or platforms that are not Supported Hardware or (c) is running in an unsupported Use Case as described in an Exhibit. You are responsible for testing the Software before deploying it in your environment. You should also backup your systems on a regular basis and have those backups available if needed for support purposes. Except as otherwise expressly stated, Support does not include data migration or data recovery support.

Red Hat will use commercially reasonable efforts to provide Support in accordance with the guidelines contained in Table 2.7 below. Support is provided in the English language and may be available in other languages based on available resources. Red Hat's Support

2.7 Service Level Guidelines. Support is available in one or more of the following support levels, depending on the Red Hat Product: Self-support, Standard or Premium, as shown in Table 2.7 below. Software Access and Software Maintenance are generally provided to you through a Red Hat-hosted delivery portal, such as Red Hat Customer Portal, Red Hat Update Infrastructure ("RHUI") and/or Red Hat Network ("RHN") (collectively, "Red Hat Portal"). After the Initial Response, Red Hat will provide status updates on the issue until (i) the issue is resolved; (ii) the issue is downgraded to a lower Severity Level (in which case status updates will be provided in accordance with the update guidelines applicable the new Severity Level); or (iii) the parties agree on an alternative update schedule.

Table 2.7

Table 2.7	Self-support	Standard	Prem	ium
Hours of Coverage	None	Standard Business Hours	Standard Business Hours And 24x7 for Severity 1 and 2	
Support Channel	None	Web and Phone	Web and Phone	
Number of Cases	None	Unlimited	Unlim	ited
Software Maintenance	via Red Hat Portal	via Red Hat Portal	via Red H	at Portal
Response Guidelines	N/A	Initial and Ongoing Response	Initial Response	Ongoing Response
Severity 1 (Urgent): A problem that severely impacts your use of the Software in a production environment (such as the loss of production data or production systems not functioning). The situation halts your business operations and no procedural work around exists.	N/A	1 Business Hour	1 hour	1 hour
Severity 2 (High): A problem where the Software is functioning but your use in a production environment is severely reduced. The situation is causing a high impact to portions of your business operations and no procedural work around exists.	N/A	4 Business Hours	2 hours	4 hours
Severity 3 (Medium): A problem that involves partial, non-critical loss of use of the Software in a production environment or development environment. For production environments, there is a medium-to-low impact on your business, but your business continues to function, including by using a procedural work around. For development environments, the situation is causing your project to no longer continue or migrate into production.	N/A	1 Business Day	4 Business Hours	8 Business Hours
Severity 4 (Low): A general usage question, reporting of a documentation error or recommendation for a future product enhancement or modification. For production environments, there is low-to-no impact on your business or the performance or functionality of your system. For development environments, there is a medium-to-low impact on your business, but your business continues to function, including by using a procedural work around.	N/A	2 Business Days	8 Business Hours	2 Business Days

Note: The guidelines set forth in Table 2.7 do not apply to the Developer Subscriptions described in Exhibit 1.C.

2.8 Support Contacts. For the Software Subscriptions, you may contact Red Hat through your designated Support Contacts. You may designate up to the number of contacts described in Table 2.8 below based on the number of Standard and Premium Software Subscriptions you have purchased (other than for Academic Edition Customers with Campus Wide Subscriptions*). We will provide Subscription Services to you solely by communicating during the Hours of Coverage with the individual Support Contact(s) you appoint. For Premium Support, in order to receive 24x7 coverage for Severity 1 and 2 issues, you must provide a dedicated point of contact to be available until the issue is resolved. You may change your designated Support Contacts by notifying us in writing and giving us five business days to process the change. The Support Contacts should have "read and write" access to the necessary files, English language communication skills and relevant technical knowledge.

Table 2.8

Number of Standard and Premium Software Subscriptions (excluding Red Hat JBoss Subscriptions)	Number of Cores included in Red Hat JBoss Software Subscriptions	Support Contacts
1 to 250	1 to 255	Up to 20
251 to 1000	256 to 1,024	Up to 40
Every additional 1,000	Every additional 1,024	40 additional

 $^{^*}$ For Academic Edition Customers with Campus Wide Subscriptions, you may have three (3) Support Contacts for every one thousand (1,000) FTEs.

EXHIBIT 1.A

RED HAT ENTERPRISE LINUX AND RELATED SOFTWARE SUBSCRIPTIONS



1. Unit of Measure and Purchasing Requirements for Red Hat Enterprise Linux Server

You must purchase the appropriate number and type of Software Subscription(s) for each Unit of Red Hat Enterprise Linux Server including variants such as Red Hat Enterprise Linux Server for HPC Compute Nodes, Red Hat Enterprise Linux for Power and Red Hat Enterprise Linux for SAP Applications, based on the capacity of such Unit as described in Table 1 below. Multiple Software Subscriptions may be "stacked" to account for the capacity of a given Unit subject to certain limitations (see Note 1 below). "Stacking" (or "Stackable") means the application of more than one of the same Subscription to account for additional capacity.

Table 1

				acity	
Software Subscription	Support Level	Unit of Measure	Socket(s) or SOCs	Virtual Nodes	Stackable
Red Hat Enterprise Linux Server (Physical or Virtual Nodes) Red Hat Enterprise Linux for SAP HANA (see Note 1 below)	Standard or Premium	Physical Node or Virtual Node	N	r each Physical ode or al Nodes	Physical Node: Yes Virtual Node: Yes
Red Hat Enterprise Linux for Virtual Datacenters (see Note 2 below)	Standard or Premium	Physical Node	Socket-pair	Unlimited Virtual Nodes running on a Socket-pair	Physical Node: Yes Virtual Node: Yes
Red Hat Enterprise Linux for Power	Standard or Premium	Power IFL	Up to 4 processor cores	N/A	Power IFL: Yes
Red Hat Enterprise Linux for System z	Standard or Premium	System z IFL	N/A	N/A	System z IFL: Yes
Red Hat Enterprise Linux for Hyperscale	Standard	Physical Node	Band of SOCs	None	Physical Node: No Virtual Node: No
Red Hat Enterprise Linux Server Entry Level (see Note 1 below)	Self-support	Physical Node	Socket-pair	None	Physical Node: No Virtual Node: Yes
Red Hat OpenStack Platform Red Hat Enterprise Linux with Smart Virtualization	Standard or Premium	Physical Node	Socket-pair	Unlimited Virtual Nodes running on a Socket-pair	Physical Node: Yes Virtual Node: Yes
Red Hat Enterprise Linux Server	Standard or Premium	System	1-2 Sockets, 4 Sockets, or 8 Sockets	1 Virtual Guest, 4 Virtual Guests, or Unlimited Virtual Guests	Sockets: No Virtual Guest: Yes
Red Hat Enterprise Linux Server	Self-support	System	1-2 Sockets	1 Virtual Guest	Sockets: No Virtual Guest: No
Red Hat Enterprise Linux for PRIMEQUEST (see Note 1 below)	Premium	Physical Node	4 Sockets, 10 L 6 Sockets, 11 L	Logical Partitions Logical Partitions Logical Partitions or Logical Partitions	Sockets: No Virtual Guest: Yes
Red Hat Enterprise Linux for PRIMEQUEST	Premium	System	1-2 Sockets, 4 Sockets, 6 Sockets or 8 Sockets	Virtual Guest, Virtual Guests or Unlimited Virtual Guests	Sockets: No Virtual Guest: Yes

A "Socket" is a socket occupied by a CPU on a System or Physical Node. For purposes of this Exhibit 1.A, a "Socket-pair" is up to two sockets each occupied by a CPU on a System or Physical Node. A "System on a Chip" or "SOC(s)" is a single integrated circuit that includes the major components of a computer and is generally recognized as a system on a chip. A "Virtual Guest" is an instance of the Software that is executed, in whole or in part, on a System that is a virtual machine. When you deploy a guest operating system in a virtualized environment, you are responsible for securing the required license rights for any third party operating systems or other software that you use.

Note 1: Each Physical Node supports a maximum number of four (4) virtual instances that may consist of Red Hat Enterprise Linux Virtual Nodes, Virtual Guests or any other guest operating system, provided containers that only include user space (non-kernel) components do not count towards the maximum four (4) virtual instances.

Note 2: Please note that Red Hat Enterprise Linux for Virtual Datacenters Subscriptions do not include an entitlement for the host operating system.

2. Red Hat Enterprise Linux Server Add-Ons

Red Hat Enterprise Linux Server Subscriptions may be purchased with one or more add-on options ("Add-On(s)"). Add-Ons require a separate paid and active Software Subscription for each Unit that deploys, installs, uses or executes such Add-On. Each Unit of Add-Ons (i) must match the Unit of Measure and capacity as the underlying Red Hat Enterprise Linux Unit and (ii) inherits the Support Level (Standard and/or Premium) of the underlying Red Hat Enterprise Linux Unit. Add-Ons are not supported on Red Hat Enterprise Linux Subscriptions with a Self-support service level except Smart Management Add-Ons. The Add-Ons include: High Availability, Load Balancer, Resilient Storage, Scalable File System, Smart Management, Extended Update Support, Extended Life Cycle Support and Red Hat Insights.

2.1 Red Hat Insights. Red Hat Insights is an optional Add-On hosted service designed to help you proactively identify and resolve technical issues in Red Hat Enterprise Linux and Red Hat Cloud Infrastructure environments.

3. Red Hat Enterprise Linux Server Support Options

Red Hat Enterprise Linux Server Subscriptions may be purchased with various levels of Production Support including Self-support, Standard and Premium Support Levels. Note that not all Production Support options are available for all Red Hat Enterprise Linux Server Subscriptions, configurations or customers. For example, Self-support is available only for (a) Systems without Add-Ons (except Smart Management); and (b) customers who do not have a Red Hat Technical Account Manager.

4. Red Hat Enterprise Linux Server Use Cases

Subscription Services are provided for Software only when used for its supported purpose ("Use Case") in accordance with the terms of this Exhibit 1.A and Table 4 below.

Table 4

Software	Use Case
Red Hat Enterprise Linux Server Red Hat Enterprise Linux for Power Red Hat Enterprise Linux Server for System z	Server computing, including delivery of services to other logical or physical client or server systems and the execution of multi-user applications. You may not split or apply one Red Hat Enterprise Linux Software Subscription to two or more Units.
Red Hat Enterprise Linux for Real Time	Only systems running (a) operating environments identified at www.redhat.com/mrg/hardware as Red Hat Enterprise Linux for Real Time compatible and (b) hardware systems identified as Red Hat Enterprise Linux for Real Time certified at https://hardware.redhat.com will be supported.
Red Hat Enterprise Linux for PRIMEQUEST	Subscription Services are provided only on Fujitsu PRIMEQUEST systems. You may not split or apply one Red Hat Enterprise Linux for PRIMEQUEST Software Subscription to two or more Units or any other systems.
Red Hat Enterprise Linux for SAP HANA	Subscription Services are provided only on Supported Hardware certified by SAP to run SAP's HANA platform.
Red Hat Enterprise Linux for Hyperscale	Subscriptions Services are provided only on Supported Hardware in the form of chassis that contain and use at least five (5) SOCs.
Red Hat Enterprise Linux for HPC Compute Nodes Red Hat Enterprise Linux for HPC Head Nodes	High performance computing ("HPC") that consists of a minimum set of four Systems that are networked and managed to perform compute-intensive workloads ("cluster") with all of the following characteristics: (a) the cluster is used for compute-intensive distributed tasks sent to individual compute nodes within the cluster, (b) the cluster works as a single entity or system on specific tasks by performing compute-intensive operations on sets of data (Systems running a database, web application, load balancing or file serving clusters are not considered HPC nodes), (c) the number of management or head nodes does not exceed one quarter of the total number of nodes in the cluster and (d) all compute nodes in the cluster have the same Red Hat Enterprise Linux configuration. When Red Hat Enterprise Linux for HPC Head Nodes (an optional Software Subscription for management of compute nodes) is combined with Red Hat Enterprise Linux for HPC Compute Nodes Software Subscriptions for the compute nodes in the same cluster, the compute nodes inherits the Service Level (as set forth in Section 2.1 of Appendix 1) of the Head Node.

Software	Use Case
Red Hat Enterprise Linux for Grid Nodes	A compute "Grid" means a minimum of fifty (50) Socket-pairs that are networked and managed to solve workloads with the following characteristics: (a) all the nodes in the group of systems have the same Red Hat Enterprise Linux configuration, (b) the group of systems is running a single application or is controlled by a single job scheduler, (c) the workloads are sent to the group of systems by a job scheduler, (d) the workloads are maintained in a single distributed application across the nodes in the group of systems, (e) the workloads are non-interactive, and (f) the production outage of the complete group of systems is defined as 30% of the nodes in the group of systems being unable to run the workload. The nodes in Grid are not running databases, web applications, load balancing, or file services.
Red Hat Enterprise Linux with Smart Virtualization Red Hat Enterprise Linux for Power with Smart Virtualization	Supported on physical hardware solely to support virtual guests. Red Hat Enterprise Linux with Smart Virtualization is designed to run and manage virtual instances. The included Red Hat Enterprise Linux is supported solely when used as the host operating system with the Red Hat Enterprise Virtualization Hypervisor or when used as the guest operating system with virtual machines.
Add-Ons: High Availability, Load Balancer, Resilient Storage, Scalable File System, Extended Update Support, Extended Life Cycle Support, and Red Hat Insights	Only supported on active Standard and Premium level Red Hat Enterprise Linux Server Software Subscriptions.
Red Hat Enterprise Linux Server used as a Virtual Guest	Virtual Guests may be pooled or shared on any other System that has a Software Subscription with the same (a) Support Level (Standard or Premium) and (b) number of Virtual Guests (1, 4 or unlimited Virtual Guests), provided that you do not exceed the total number of Virtual Guests associated with the underlying Software Subscriptions. Note: When you use Red Hat Enterprise Virtualization or third party software as a host operating system or hypervisor, you must purchase separate Software Subscriptions for each host System running the Virtual Guest.
Red Hat Enterprise Linux for Disaster Recovery	Systems or Physical Nodes used intermittently for disaster recovery purposes such as systems receiving periodic backups of data from production servers, provided those disaster recovery systems have the same Service Levels (as set forth in Appendix 1, Section 2.7) and configurations (e.g. Socket-pairs, Virtual Guests, Cores).
Red Hat Enterprise Linux for Retail	Systems used at retail store locations with the same application stack excluding any data center deployments.

4.1 Red Hat Enterprise Linux Server – Atomic Host. Red Hat Enterprise Linux Server may be deployed in Atomic Host mode. Atomic Host mode is an optional delivery, deployment and updating mechanism designed to support container based environments. At installation, you may elect to install Red Hat Enterprise Linux Server via (a) the RPM package manager based methodology or (b) the Atomic Host layered image methodology for container based applications. Each deployment of Red Hat Enterprise Linux, regardless of the method, constitutes a Unit.

5. Red Hat Enterprise Virtualization Use Cases

You must purchase the appropriate number and type of Software Subscription(s) for each Physical Node that deploys, installs, uses or executes Red Hat Enterprise Virtualization based on the number of Socket-pairs. Subscription Services are provided for Red Hat Enterprise Virtualization only when used for its supported Use Case in accordance with the terms of this Exhibit 1.A and Table 5 below. A Red Hat Enterprise Virtualization Subscription comes with RHEV-Manager, which requires the purchase of an underlying Red Hat Enterprise Linux Subscription for each Unit (i.e., Physical Node or Virtual Node) running RHEV-Manager.

Table 5

Software	Use Case
Red Hat Enterprise Virtualization	Supported on physical hardware solely to support virtual guests. Red Hat Enterprise Virtualization is designed to run and manage virtual instances and does not support user-space applications. Red Hat Enterprise Virtualization may be used as a virtual desktop infrastructure solution, however, the Subscription does not come with software or support for the desktop operating system. You must purchase the operating system for each instance of a desktop or server separately.

6. Red Hat Enterprise Linux Desktop Software Subscriptions

Software Subscriptions for Red Hat Enterprise Linux Desktops and Workstations are subject to the parameters set forth in Table 6 below. Each Red Hat Enterprise Linux Desktop and Workstation Software Subscription includes one Red Hat Network system entitlement and one Smart Management Module, each to be used solely with a single Red Hat Enterprise Linux Desktop or Workstation System. Production Support for Red Hat Enterprise Linux Desktop subscriptions is limited to web-based support only for your helpdesk support personnel. Red Hat is not obligated to support your end users directly.

Table 6

	Desktop	Workstation
Maximum CPUs supported	1	2
Maximum memory supported	8GB	Unlimited
Number of Virtual Guests supported	1	1
Includes open source server applications (e.g., Apache, Samba, or NFS), supported for use on personal systems for testing and development purposes or to share data with peers	No	Yes
Includes the Red Hat Enterprise Linux software development stack	No	Yes

6.1 Red Hat Enterprise Linux Desktop and Red Hat Enterprise Linux Workstation Use Cases. Subscription Services are provided for Red Hat Enterprise Linux Desktop and Workstation only when used for its supported Use Case in accordance with the terms of this Exhibit 1.A and Table 6.1 below.

Table 6.1

Software	Use Case
	Personal computing systems with a primary purpose of executing applications and/or services for a single user who is typically working from a directly connected keyboard and display.
	Note: Deploying the associated Red Hat Network system entitlements or Smart Management Modules on a system other than Red Hat Enterprise Linux Desktop or Workstation, as applicable, is not a supported Use Case.

7. Red Hat Enterprise Linux – Academic Edition

Software Subscriptions for Red Hat Enterprise Linux – Academic Editions are subject to the additional terms and conditions, including Use Cases set forth in Table 7 below.

Table 7

Table /	
Software	Use Case
Red Hat Enterprise Linux – Academic Server Red Hat Enterprise Linux Academic Desktop Red Hat Enterprise Linux Academic Workstation	Red Hat Enterprise Linux – Academic Edition Subscriptions are supported for use by qualified academic institutions for teaching and learning purposes that consist of (a) faculty, staff, or student laptops or desktops for personal and academic use, (b) computer labs available to faculty, staff, and students for general education use, (c) classroom desktops, (d) laboratories for technical and research use and/or (e) laboratories for software development use. Red Hat Enterprise Linux – Academic Edition is not supported when used for any purpose other than as described in (a) – (e) above. Qualified academic institutions must be accredited by a national accreditation agency (e.g. the United States accreditation is located at http://ope.ed.gov/accreditation/Search.aspx). Note: When you use Red Hat Enterprise Linux – Academic Edition for non-qualified academic purposes as described above, standard Red Hat Enterprise Linux subscription rates apply.
Red Hat Enterprise Linux Academic Site Subscription	Red Hat Enterprise Linux Academic Site Subscriptions are supported for use by qualified academic institutions. Qualified academic institutions must (a) be accredited by a national accreditation agency (e.g. the United States accreditation is located at http://ope.ed.gov/accreditation/Search.aspx) and (b) have at least one thousand (1,000) FTEs.
Red Hat Infrastructure for Academic Institutions - Site Subscription	Red Hat Infrastructure for Academic Institutions - Site Subscriptions are supported for use by qualified academic institutions. Qualified academic institutions must (a) be accredited by a national accreditation agency (e.g. the United States accreditation is located at http://ope.ed.gov/accreditation/Search.aspx) and (b) have at least one thousand (1,000) FTEs.

EXHIBIT 1.B

RED HAT JBOSS MIDDLEWARE SOFTWARE SUBSCRIPTIONS



- 1. Red Hat JBoss Middleware Software Subscriptions
- 1.1 Red Hat JBoss Middleware Software Subscription Overview. When you purchase a Software Subscription to Red Hat JBoss Middleware (such as Red Hat JBoss Enterprise Application Platform), you will receive:
 - (a) Software Access for the Red Hat JBoss Middleware Software Subscription that you purchased (such as Red Hat JBoss Enterprise Application Platform in the example above) and access to certain additional Red Hat JBoss Middleware software code (we refer to this additional code as the "Supplemental JBoss Software"), subject to the Supplemental JBoss Software Conditions described in Section 1.2 below:
 - (b) Production and Development Support for the Red Hat JBoss Middleware Software Subscription product that you purchased (again, Red Hat JBoss Enterprise Application Platform in the example above) but not for the Supplemental JBoss Software;
 - (c) Software Maintenance for both the Red Hat JBoss Middleware Software Subscription product that you purchased and for the Supplemental JBoss Software, subject to the Supplemental JBoss Software Conditions below; and
 - (d) Entitlements for Red Hat JBoss Core Services Collection in an amount equal to the number of purchased Cores for Red Hat JBoss Middleware Software Subscriptions excluding Red Hat JBoss Web Server and Red Hat JBoss Web Server Plus Subscriptions (which only include the management components of the Core Services Collection). "Red Hat JBoss Core Services Collection" is a collection of components that provide common functionality (such as monitoring and management, load balancing, process control and single sign-on) across a majority of the Red Hat JBoss Middleware portfolio.
- 1.2 Supplemental JBoss Software Conditions. Software Access and Software Maintenance for Supplemental JBoss Software is intended and available for Development Purposes only and for up to 25 users for each 16 Core Band Subscription of Red Hat JBoss Middleware Software that you purchased. If you deploy or use the Supplemental JBoss Software for Production Purposes or for more than 25 users, you agree to purchase the appropriate Software Subscriptions for each Unit that you deploy or use. Red Hat's Open Source Assurance Program applies only to the Red Hat JBoss Middleware Software Subscription that you purchased (such as Red Hat JBoss Enterprise Application Platform in the example above) and does not apply to Supplemental JBoss Software. JBoss OpenShift Container Platform Subscriptions (defined below) are not considered Supplemental JBoss Software. Each installation and use of JBoss OpenShift Container Platform Subscriptions Software for either Development Purposes or Production Purposes is a Unit and requires a paid Software Subscription.
- 1.3 Red Hat JBoss Middleware Use Cases. Subscription Services are provided for Red Hat JBoss Middleware Software Subscriptions only when used for its supported purpose ("Use Case") as set forth at: https://access.redhat.com/support/offerings/jboss/. If Red Hat determines that any of the JBoss Middleware Software Subscription Services or Software is being used to support software obtained from community sites without purchasing a corresponding Software Subscription for such community software, Red Hat may, without limiting its other rights or remedies, immediately suspend performance and/or terminate the Agreement.
- 1.4 Red Hat JBoss Enterprise Application Platform ("JBoss EAP") Red Hat JBoss Fuse, Red Hat JBoss BRMS, Red Hat JBoss Data Grid and Red Hat JBoss A-MQ Subscriptions. Standard (non-OpenShift Container Platform offerings)Red Hat JBoss EAP, Red Hat JBoss Fuse, Red Hat JBoss BRMS, Red Hat JBoss Data Grid and Red Hat JBoss A-MQ Software Subscriptions come with the Software for their OpenShift Container Platform equivalent (i.e. Red Hat JBoss EAP for OpenShift Container Platform, Red Hat JBoss Fuse for OpenShift Container Platform, Red Hat JBoss BRMS for OpenShift Container Platform, Red Hat JBoss Data Grid for OpenShift Container Platform or Red Hat JBoss A-MQ for OpenShift Container Platform respectively). The JBoss OpenShift Container Platform Subscription Software included with these Software Subscriptions is supported when deployed on OpenShift Enterprise subject to the same portability rules as set forth in Section 1.5.2 below and if deployed, require active paid Software Subscriptions. Non-OpenShift Container Platform Red Hat JBoss Middleware Software is not configured for use with Red Hat OpenShift Container Platform.
- 1.5 Red Hat JBoss OpenShift Container Platform Subscription Services.
- 1.5.1 Purchasing Conditions. Red Hat offers Red Hat JBoss Fuse for OpenShift Container Platform, Red Hat JBoss AM-Q for OpenShift Container Platform and Red Hat JBoss EAP for OpenShift Container Platform Subscriptions (together referred to as "JBoss OpenShift Container Platform Subscriptions"). You must purchase the appropriate number and type of JBoss OpenShift Container Platform Subscription(s) for each Unit deployed on your premises or elsewhere based on the capacity of such Unit as described in Table 1.5.1 below. Multiple Software Subscriptions may be "stacked". "Stacking" (or "Stackable") means the application of more than one of the same Software Subscription to account for additional capacity.

Table 1.5.1

Software Subscription	Support Level	Unit of Measure	Capacity	Stackable
Red Hat JBoss Middleware for	Standard	16 Virtual Gue	ests on 2 Cores	Cores: Yes
OpenShift Container Platform	or Premium	Physical Nor	or de Socket-pair	Physical Node: Yes

A "Socket-pair" is up to two sockets each occupied by a CPU on the Physical Node. A "Core" is (a) a physical processing core located in a CPU or (b) a virtual processing core within a virtual machine, in each case, that contains or executes the Software running for Production Purposes or Development Purposes.

1.5.2 JBoss OpenShift Container Platform Subscription Portability. Your use of the respective JBoss OpenShift Container Platform Subscription is supported on (a) a standard on-premise installation, (b) OpenShift Container Platform or (c) a combination of the two subject to the following conditions: (1) you have a minimum of at least sixteen (16) Cores (for Virtual Guest) or a Socket-pair (for Physical Node) of the respective Subscription; (2) Software Subscriptions must be purchased in multiples of sixteen (16) Cores or Socket-pair (as applicable); and (3) the total number of Cores or Socket-pairs deployed cannot exceed the total number of Units purchased. Red Hat OpenShift Container Platform Subscriptions are sold separately.

EXHIBIT 1.C DEVELOPER SUBSCRIPTIONS



1. Red Hat Enterprise Linux Developer Suite

Red Hat Enterprise Linux Developer Suite provides an open source development environment that consists of Red Hat Enterprise Linux with built-in development tools, certain Red Hat Enterprise Linux Add-Ons, Red Hat Enterprise Linux for Real Time, Smart Management and access to Software Maintenance, but no Development or Production Support.

If you use any of the Subscription Services or Software associated with Red Hat Enterprise Linux Developer Suite for Production Purposes, or use the Red Hat Enterprise Linux Software Subscription entitlement independently, you agree to purchase the applicable number of Units of the applicable Software Subscription. Red Hat does not provide Production Support or Development Support for Red Hat Enterprise Developer Suite.

2. Red Hat Enterprise Linux Developer Suite Use Cases

Subscription Services are provided for Red Hat Enterprise Linux Developer Suite only when used for its supported Use Case in accordance with the terms of this Exhibit 1.C and Table 2 below.

Table 2

Software	Use Case
IRed Hat Enterprise Linux Developer Suite	Subscription Services for Red Hat Enterprise Linux Developer Suite are available for Development Purposes only.

3. Red Hat JBoss Developer Studio Subscriptions

Red Hat JBoss Developer Studio Portfolio Edition provides an open source development environment that consists of Eclipse, Eclipse Tooling and Red Hat JBoss Middleware platforms. Red Hat JBoss Developer Studio Portfolio Edition also includes one entitlement to a Red Hat Enterprise Linux Software Subscription, with built-in development tools and access to Software Maintenance, but no Development or Production Support.

If you use any of the Subscription Services or Software associated with Red Hat JBoss Developer Studio Portfolio Edition for Production Purposes, or use the Red Hat Enterprise Linux Software Subscription entitlement independently of your use of the Red Hat JBoss Developer Studio Subscription, you agree to purchase the applicable number of Units of the applicable Software Subscription. Red Hat does not provide Production Support or Development Support for Red Hat JBoss Developer Studio Portfolio Edition.

4. Red Hat JBoss Developer Studio Portfolio Edition Use Cases

Subscription Services are provided for Red Hat JBoss Developer Studio only when used for its supported Use Case in accordance with the terms of this Exhibit 1.C and Table 4 below.

Table 4

Software	Use Case
TRAC Hat TRACE DEVALABLE STUDIO PARTALIA Edition	Subscription Services for Red Hat JBoss Developer Studio Portfolio Edition are available for Development Purposes only.

5. Red Hat Enterprise Linux Developer Workstation and Red Hat Enterprise Linux Developer Support Subscriptions

For each Red Hat Enterprise Developer Workstation and/or Red Hat Enterprise Linux Developer Support Subscription that you purchase, during the term of the subscription Red Hat will provide you with (a) access to the supported versions of the Red Hat Enterprise Linux and updates through a Red Hat Portal; and (b) assistance for: (i) installation, usage and configuration support, diagnosis of issues, and bug fixes for Red Hat Enterprise Linux, but only for issues related to your use of Red Hat Enterprise Linux for Development Purposes and (ii) advice concerning application architecture, application design, industry practices, tuning and application porting. Use of Red Hat Enterprise Linux Developer Workstation or Red Hat Enterprise Linux Developer Support Subscriptions for Production Purposes is not a supported use case. If you use any of the Subscription Services associated with Red Hat Enterprise Linux Developer Workstation or Red Hat Enterprise Linux Developer Support for Production Purposes, you agree to purchase the applicable number of Units of the relevant Software Subscription with Production Support.

The Red Hat Enterprise Linux Developer Workstation and Red Hat Enterprise Linux Developer Support Subscriptions do not include support for (a) modified software packages, (b) wholesale application debugging, (c) software included in the Red Hat Extras repository, supplementary RHN channels or preview technologies, including but not limited to software obtained from community sites, or (d) use of the Software for Production Purposes. If Red Hat determines that any of the Red Hat Enterprise Developer Workstation or Red Hat Enterprise Linux Developer Support Subscription services or software provided hereunder is being used to support software obtained from community sites, Red Hat may, without limiting its other rights or remedies, immediately suspend performance and/or terminate the Agreement.

5.1 Red Hat Enterprise Linux Developer Workstation and Developer Support Subscription Levels. You may purchase the following types of Red Hat Enterprise Developer Workstation and/or Developer Support Subscriptions: (a) Professional or (b) Enterprise, in each case as described in Table 5.2 below, and as set forth herein.

5.2 Red Hat Enterprise Linux Developer Support Subscription Level Guidelines. Red Hat will use commercially reasonable efforts to provide Red Hat Enterprise Developer Workstation or Developer Support Subscription Services in accordance with the guidelines set forth in Table 5.2. below. Red Hat's technical support telephone numbers and Standard Business Hours are listed at https://access.redhat.com/support/contact/technicalSupport.html. For Red Hat Enterprise Developer Workstation or Developer Support Subscriptions, you may contact Red Hat through your designated Developer Support Contact(s). We will provide Developer Support to you for the number of systems set forth in Table 5.2 below, solely by communicating during the Hours of Coverage with the individual Developer Support Contract(s) you appoint. Red Hat Enterprise Developer Workstation or Developer Support Subscriptions are intended for Development Purposes only.

Table 5.2

Table 3.2				
	Red Hat Enterprise Linux Developer Workstation Professional	Red Hat Enterprise Linux Developer Workstation Enterprise	Red Hat Enterprise Linux Developer Support Professional	Red Hat Enterprise Linux Developer Support Enterprise
Supported Software	Red Hat Enterprise Linux		Red Hat Enterprise Linux	
Hours of Coverage	Standard Business Hours		Standard Business Hours	
Support Channel	Web and phone		Web and phone	
Number of Support Requests	Unlimited		Unlim	nited
Number of Systems	1 System		25 Sys	stems
Response Guidelines	2 Business Days for all issues	4 Business Hours for all issues	2 Business Days for all issues	4 Business Hours for all issues

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EXHIBIT 1.D RED HAT STORAGE SUBSCRIPTIONS



1. Red Hat Storage Subscriptions

Red Hat offers two Red Hat Storage product lines: Red Hat Ceph Storage and Red Hat Gluster Storage. References to "Red Hat Storage Subscriptions" refer to both product lines. You must purchase the appropriate number and type of Software Subscription(s) for each Unit of Red Hat Storage on your premise or elsewhere.

- 1.1 Red Hat Gluster Storage. Red Hat Gluster Storage includes management tools to manage one or more instances of Red Hat Gluster Storage ("Red Hat Storage Console"). If you purchase Red Hat Gluster Storage for Public Cloud Subscriptions for use on a Vendor's Cloud, the Vendor may have additional terms and fees, independent of this Agreement, for such usage. "Vendor" means the Red Hat authorized third party from whom you purchased Cloud services. "Cloud" means a Vendor's hosted computing infrastructure of shared resources that provides virtual machines or instances to end users on an on-demand basis. For Red Hat Gluster Storage for Public Cloud, Exhibit 1.1 also applies. Red Hat Gluster Storage for Hybrid Cloud Subscriptions is a bundle (a) of an equal number of Red Hat Gluster Storage and Red Hat Gluster Storage for Public Cloud entitlements and (b) sold in even numbers of Units.
- 1.2 Red Hat Ceph Storage. Red Hat Ceph Storage is priced according to the total amount of storage capacity and is sold in Storage Bands that contain certain capacities. Should you exceed the capacity of the Storage Band, you must upgrade to the next Storage Band and or purchase multiple Storage Bands that may be "stacked" to provide the required Storage capacity. "Stacking" (or "Stackable") means the application of more than one of the same Software Subscription to account for additional Capacity.

Each Ceph Storage Software Subscription comes with a fixed number of Software Subscriptions to (a) Red Hat Enterprise Linux and (b) Red Hat Ceph Storage for up to a certain number of Physical Nodes or Virtual Nodes. Should the number of Physical or Virtual Nodes be consumed before the Storage Band capacity is reached, you may upgrade to the next Storage Band to receive additional Physical or Virtual Nodes.

2. Red Hat Storage Subscription Use Cases

Subscription Services for each of Red Hat Storage Subscription are provided only when used for its supported purpose ("Use Case") in accordance with the terms of this Exhibit 1.D and Table 2 below.

Table 2

Software Subscription	Use Case
Red Hat Gluster Storage Red Hat Gluster Storage Module	Red Hat Gluster Storage is intended to be used as a storage system and will be supported only when used as a storage node. This Subscription is not supported on non-server hardware such as desktops or workstations and is intended for use on a dedicated System, Physical Node, Virtual Node or Virtual Guest; running other applications and/or programs of any type on the System, Physical Node, Virtual Node or Virtual Guest can have a negative impact on the function and/or performance of the Subscription and is not a supported Use Case. Each Subscription includes one Software Subscription to Red Hat Enterprise Linux Server and the Scalable File System Add-on, which are supported solely in connection with the use of the Red Hat Gluster Storage Subscription. Red Hat Gluster Storage Module does not include a Red Hat Enterprise Linux Software Subscription which must be purchased separately.
Red Hat Ceph Storage	Red Hat Ceph Storage is intended to be used as a storage system and will be supported only when used as a storage node. This Subscription is not supported on non-server hardware such as desktops or workstations and is intended for use on a dedicated System, Physical Node, Virtual Node or Virtual Guest; running other applications and/or programs of any type on the System, Physical Node, Virtual Node or Virtual Guest can have a negative impact on the function and/or performance of the Subscription and is not a supported Use Case. Each Subscription includes one Software Subscription to Red Hat Enterprise Linux and the Scalable File System Addon, which is supported solely in connection with the use of the Red Hat Ceph Storage Subscription.
Red Hat Gluster for Public Cloud	Red Hat Gluster Storage for Public Cloud is intended to be used as a storage system and will be supported only when used as a storage node. When running in Amazon Web Services, an EC2 M1 Large dedicated instance is required in order to be supported. Running other applications and/or programs of any type on the same instance can have a negative impact on the function and/or performance of the Red Hat Gluster Storage for Public Cloud and is not a supported Use Case. Each Subscription includes one Software Subscription to Red Hat Enterprise Linux Server and the Scalable File System Add-on, which are supported solely in connection with the use of Red Hat Storage Subscription.
Red Hat Gluster for Red Hat OpenStack Platform	Red Hat Gluster Storage for Red Hat OpenStack Platform is intended to be used as a storage system with Red Hat OpenStack Platform and will be supported only when

Software Subscription	Use Case
	used as a storage node and is not supported on non-server hardware such as desktops or workstations. Red Hat Gluster Storage for Red Hat OpenStack Platform is intended for use on a dedicated Physical Node; running other applications and/or programs of any type on the Physical Node can have a negative impact on the function and/or performance of the Red Hat Gluster Storage for Red Hat OpenStack Platform and is not a supported Use Case. Each Red Hat Storage for Red Hat OpenStack Platform Subscription includes one Software Subscription to Red Hat Enterprise Linux Server and Red Hat JBoss Enterprise Application Platform, which are supported solely in connection with the use of Red Hat Gluster Storage.
Red Hat Ceph Storage Pre-Production Subscription Red Hat Gluster Storage Pre-Production Subscription	Red Hat Ceph Storage Pre-Production and Red Hat Gluster Storage Pre-Production Subscriptions are subject to the same Use Case as provided in the description for Red Hat Ceph Storage and Red Hat Gluster Storage above, provided, however that Support is only provided for Pre-Production Purposes.

3. Pre-Production Support

A Red Hat Ceph Storage or Red Hat Gluster Storage Pre-Production Subscription consists of assistance with issues relating to the installation, configuration, administrative tasks and basic trouble-shooting prior to a production deployment ("Pre-Production Purposes") of the Red Hat Ceph Storage or Red Hat Gluster Storage Software components, but it does not include architectural design reviews or advice, advanced configuration topics, performance analysis or reviews. Requests for other assistance including, but not limited to Production Support are not included within the scope of the Pre-Production Subscription. Consulting services are available under the terms of a separate written agreement. Red Hat Ceph Storage or Red Hat Gluster Storage Pre-Production Subscription Services are provided at the Standard Support level.

EXHIBIT 1.E RED HAT INTEGRATED SOLUTIONS



1. Red Hat Cloud Infrastructure Subscriptions

- 1.1 Entitlements and Purchasing Requirements. You must purchase the appropriate number of Software Subscription(s), based on the number of Socket-pairs in each Physical Node. For purposes of this Exhibit 1.E, a "Socket-pair" is up to two sockets each occupied by a CPU on a System or Physical Node. A Red Hat Cloud Infrastructure Software Subscription comes with a Red Hat CloudForms Software Subscription but you are required to purchase additional Red Hat CloudForms Software Subscriptions if you are managing any virtual machines with the Red Hat Cloud Infrastructure Subscription that are not running on the same Physical Node as the active Red Hat CloudForms Software Subscription.
- **1.2 Supported Use Cases**. Subscription Services are provided for Software only when used for its supported purpose ("**Use Case**") in accordance with the terms of this Exhibit 1.E and Table 1.2 below.

Table 1.2

Table 1.2	
Software Subscription	Use Case
Red Hat Cloud Infrastructure	Red Hat does not provide Subscription Services for the Software when used on a Physical Node that is not a server. Red Hat Enterprise Linux is supported solely when used as the host operating system for Red Hat OpenStack Platform or when used as the guest operating system on virtual machines created and managed with this Subscription. Red Hat Enterprise Virtualization is supported solely when used to run and manage virtual guests for this Subscription. Red Hat Enterprise Linux is currently the only supported operating system for Red Hat OpenStack Platform. If the Red Hat Cloud Infrastructure product contains an entitlement for Satellite, that Satellite only manages Physical Nodes within the Red Hat Cloud Infrastructure private cloud.
Red Hat Cloud Infrastructure (without guest OS)	Red Hat does not provide Subscription Services for the Software when used on a Physical Node that is not a server. Red Hat Enterprise Linux is supported solely when used as the host operating system for Red Hat OpenStack Platform. Red Hat Enterprise Virtualization is supported solely when used to run and manage virtual guests for this Subscription. Red Hat Enterprise Linux is currently the only supported operating system for Red Hat OpenStack Platform. You must purchase the appropriate third party license and/or subscription for the operating system and other software running on each virtual machine on the Physical Node. If the Red Hat Cloud Infrastructure product contains an entitlement for Satellite, that Satellite only manages Physical Nodes within the Red Hat Cloud Infrastructure private cloud.
Red Hat Cloud Suite	Red Hat does not provide Subscription Services for the Software when used on a Physical Node that is not a server. Red Hat Enterprise Linux is supported solely when used as the host operating system for Red Hat Cloud Suite or when used as the guest operating system on virtual machines created and managed with this Subscription. Red Hat Enterprise Linux is currently the only supported operating system for Red Hat Cloud Suite.

EXHIBIT 1.F

RED HAT OPENSTACK PLATFORM SUBSCRIPTIONS



- 1. Red Hat OpenStack Platform Subscriptions
 - (Formerly known as Red Hat Enterprise Linux OpenStack Platform.)
- **1.1 Entitlements and Purchasing Requirements.** You must purchase the appropriate number of Software Subscription(s), based on the number of Socket-pairs in each Physical Node running the Red Hat OpenStack Platform Software. For purposes of this Exhibit 1.F, a "Socket-pair" is up to two sockets each occupied by a CPU on a System or Physical Node.
- **1.2 Supported Use Cases**. Subscription Services are provided for Software only when used for its supported purpose ("**Use Case**") in accordance with the terms of this Exhibit 1.F and Table 1.2 below.

Table 1.2

Software Subscription	Use Case
Red Hat OpenStack Platform	Red Hat does not provide Subscription Services for this Software when used on a Physical Node that is not a server. Red Hat Enterprise Linux is supported solely when used as the host operating system for running Red Hat OpenStack Platform or when used as the guest operating system with virtual machines created and managed with Red Hat OpenStack Platform. Red Hat Enterprise Linux is currently the only supported operating system for Red Hat OpenStack Platform.
Red Hat OpenStack Platform (without guest OS)	Red Hat does not provide Subscription Services for the Software when used on a Physical Node that is not a server. Red Hat Enterprise Linux is supported solely when used as the host operating system for running Red Hat OpenStack Platform. Red Hat Enterprise Linux is currently the only supported operating system for Red Hat OpenStack Platform. You must purchase the appropriate third party license and/or subscription for the operating system and other software running on each virtual machine on the Physical Node.
Red Hat OpenStack Platform for Atom	Red Hat does not provide Subscription Services for the Software when used on a Physical Node that is not a server running an Intel Atom processor. Red Hat Enterprise Linux is supported solely when used as the host operating system for running Red Hat OpenStack Platform. Red Hat Enterprise Linux is currently the only supported operating system for Red Hat Platform. You must purchase the appropriate third party license and/or subscription for the operating system and other software running on each virtual machine on the Physical Node.

EXHIBIT 1.G OPTIONAL SUPPORT SUBSCRIPTIONS



1. Technical Account Management ("TAM") Service

The TAM Service is a Support Subscription that you may purchase in addition to your underlying Standard or Premium Software Subscription in order to receive enhanced Support. The TAM Service does not include support for (1) Self-support Software Subscriptions, (2) any Unit of Software (such as a System, Physical Node, Core, etc.) for which you do not have an active paid Software Subscription or (3) any Software Subscription for which support is provided by a Business Partner. When you purchase a TAM Service, you receive access to a Red Hat support engineer to provide you with:

- Access to Red Hat's technology and development plans, including beta testing and bug/feature escalation,
- Weekly review calls,
- Two (2) on-site technical review visits per year,
- Up to four Support Contacts,
- Quarterly service performance metrics via the TAM electronic dashboard, and
- A subscription to Red Hat's TAM monthly newsletter.
- 1.1 TAM Service Coverage. Each TAM Service Subscription will be limited to certain parameters (that is, a region, a customer team and/or a product line) and will be listed in the Order Form and, if not listed, the TAM parameters will be established upon the initiation of the TAM Service.
 - Regions: North America, Latin America, EMEA, Asia-Pacific (excluding Japan, China and India), China, India or Japan.
 - Customer Team: The customer team supported by the TAM, such as your development team, your system administration team, your support team, etc.
 - Red Hat Product Line: The supported Red Hat product line, such as the Red Hat Enterprise Linux, Red Hat JBoss Middleware, Red Hat Mobile Application Platform, OpenShift, Red Hat Storage, Ansible or Red Hat Cloud product lines.

1.2 TAM Service Level.

Hours of Coverage. The TAM Service is offered during local Red Hat Support Standard Business Hours as set forth at https://access.redhat.com/support/contact/technicalSupport.html (based on the physical location of the TAM representative).

Engagement of the TAM Representative Outside of Red Hat Standard Business Hours. If you have purchased Premium Red Hat Software Subscriptions, you will receive 24x7 Support for Severity 1 and 2 issues through Red Hat's 24x7 Production Support teams and not necessarily from your assigned TAM representative. Red Hat's 24x7 Production Support team will be responsible for addressing issues, but will consult with your TAM representative, as your TAM representative is available, for advice and to gain a better understanding of your infrastructure, environment and specific needs. If you have purchased multiple TAM Service Subscriptions in each of Red Hat's primary Support Regions, you will receive the benefit of extended TAM Service coverage hours, but you should follow the same process and contact the Red Hat 24x7 support numbers at https://access.redhat.com/support/contact/technicalSupport.html.

1.3 **TAM Extension Service.** The TAM Extension Service is an extension of a Red Hat Enterprise Linux TAM Service to provide additional technical knowledge such as SAP implementations on Red Hat Enterprise Linux. The TAM Extension Service requires a separate active and paid standard TAM Service Subscription.

2. Extended Update Support ("EUS")

EUS Support Subscriptions are included in certain Red Hat Enterprise Linux Premium Subscriptions and otherwise available as incremental Add-On Subscriptions for certain minor versions of Red Hat Enterprise Linux that provide longer maintenance and support cycles ("EUS Cycle") for those specific versions on Systems, Physical Nodes and/or Virtual Nodes covered by EUS Support Subscriptions. EUS provides certain security and priority bug fixes for these specific versions during the associated EUS Cycle as set forth at https://access.redhat.com/support/policy/updates/errata/.

3. Red Hat Enterprise Linux Extended Life Cycle Support Software Subscriptions

Red Hat Enterprise Linux Extended Life Cycle Support Subscriptions ("Red Hat Enterprise Linux ELS") is an Add-On subscription to your active, standard Software Subscription per System, Physical Node and/or Virtual Node for certain versions Red Hat Enterprise Linux and consists of limited Software Maintenance and Production Support as set forth at https://access.redhat.com/support/policy/updates/errata/. Red Hat Enterprise Linux ELS support is not provided under standard Red Hat Enterprise Linux Subscriptions.

3.1 Limited Maintenance and Production Support. Red Hat Enterprise Linux ELS entitles you to receive Software Maintenance and Production Support for Severity 1 and 2 problems as defined in Appendix 1 on x86 architectures, but only for a limited set of software components excluding those listed at http://www.redhat.com/rhel/server/extended lifecycle support/exclusions/. Red Hat Enterprise Linux ELS Software Maintenance is limited to those Software updates that Red Hat considers, in the exercise of its sole judgment, to be (a) critical impact security fixes independent of customer support requests and (b) selected urgent priority defect fixes that are available and qualified for a subset of the packages in specific major releases of Red Hat Enterprise Linux beyond the end of its regular production cycles. The Red Hat Enterprise Linux ELS stream will be maintained for an additional period of time immediately after the end-date of the regular production cycles of the relevant release as set forth at https://access.redhat.com/support/policy/updates/errata/.

Software fixes for Red Hat Enterprise Linux ELS will only be made available to Systems, Physical Nodes and/or Virtual Nodes that are registered with active Red Hat Enterprise Linux ELS Subscriptions. Red Hat will only provide one code base for Red Hat Enterprise Linux ELS and will not make functional enhancements to versions of Red Hat Enterprise Linux that are in the ELS cycle.

- **3.2 Red Hat Enterprise Linux ELS Unsupported Components.** Red Hat Enterprise Linux ELS covers components as supported prior to the end of the life cycle but does not cover the following (in addition to those noted in Section 3.1 above):
 - (a) Desktop applications
 - (b) Red Hat Cluster Suite
 - (c) Content from the Extras channel ("Extras" is a set of content with a shorter life cycle.) and/or
 - (d) Independent layered or Add-on products such as Directory Server, Red Hat Satellite Server, Red Hat JBoss Middleware or Scalable File System.

Red Hat reserves the right to exclude additional packages for security reasons.

- 3.3 Red Hat Enterprise Linux ELS Content Delivery. Red Hat Enterprise Linux ELS content is delivered through separate Red Hat Network base channels for the specific release and corresponding child channels if applicable. Customers will have to install a modified redhat-release package downloaded from Red Hat Network to subscribe a system to a Red Hat Enterprise Linux ELS channel.
- 4. Red Hat JBoss Middleware Extended Life Cycle Support Software Subscriptions

Red Hat JBoss Middleware Extended Life Cycle Support Subscriptions ("JBoss ELS") provide limited Software Maintenance and Production Support (and may evolve over time) after Red Hat's published End of Life date for certain Red Hat JBoss Middleware product versions (e.g. Red Hat JBoss Enterprise Application Platform, Red Hat JBoss Fuse Service Works, Red Hat JBoss Data Virtualization) and require a separate, active Red Hat JBoss Middleware Software Subscription for each product on a per Unit basis. JBoss ELS support is not provided under standard Red Hat JBoss Middleware Subscriptions. JBoss ELS is an Add-On subscription to your active, standard Software Subscription for the applicable Red Hat JBoss Middleware product and provides Extended Life Cycle Support for the Red Hat JBoss Middleware products as set forth at https://access.redhat.com/support/policy/updates/jboss notes/.

5. Red Hat Storage Extended Life Cycle Support Software Subscriptions

Red Hat Storage Extended Life Cycle Support Subscriptions ("Storage ELS") provide limited Software Maintenance and Production Support after Red Hat's published End of Life date for certain Red Hat Storage product versions and require a separate, active Red Hat Storage Software Subscription for each product on a per Unit basis. Storage ELS support is not provided under standard Red Hat Storage Subscriptions. Storage ELS is an Add-On subscription to your active, standard Software Subscription for the applicable Red Hat Storage product and provides Extended Life Cycle Support for the Red Hat Storage products as set forth at https://access.redhat.com/solutions/2020433.

EXHIBIT 1.H MANAGEMENT SUBSCRIPTIONS



1. Management Subscriptions

This Exhibit 1.H, describes optional Management Subscriptions for Red Hat Satellite, Smart Management, CloudForms, Ansible Tower and associated offerings.

2. Red Hat Satellite Server, Red Hat Capsule and Smart Management

Red Hat Satellite Server, Red Hat Capsule and Smart Management provide a delivery mechanism within your network for Software Access and Software Maintenance Services for systems running Red Hat Enterprise Linux (and other Red Hat-branded applications).

- 2.1 Entitlements and Purchasing Requirements. Each Red Hat Satellite Server includes one Premium level Software Subscription to Red Hat Enterprise Linux Server, which is supported solely in connection with the use of Red Hat Satellite Server. Red Hat JBoss Core Services Collection provides a delivery mechanism within your network for Software Access and Software Maintenance Services for systems running Red Hat JBoss Middleware Software. Please note that using Subscription Services to support or maintain any non-Red Hat Software products without purchasing Subscription Services for each instance of such non-Red Hat Product for which you use Subscription Services is not permitted.
- 2.2 Supported Use Cases. Subscription Services are provided for Red Hat Satellite Server, Red Hat Satellite Capsule and Red Hat Satellite Proxy Management Subscriptions only when used for their supported purposes ("Use Case") in accordance with the terms of this Exhibit 1.H and Table 2.2 below.

Table 2.2

able 2.2			
Software	Use Case		
Red Hat Satellite Server, Red Hat Satellite Capsule and Red Hat Satellite Proxy	Red Hat does not provide Subscription Services for Red Hat Satellite Server, Red Hat Satellite Capsule or Red Hat Satellite Proxy when used on a System or Physical Node that is not a server.		
Red Hat Satellite Capsule Red Hat Satellite Proxy	Red Hat supports Red Hat Satellite Capsule and Red Hat Satellite Proxy only when deployed with Red Hat Satellite Server.		
Red Hat Smart Management	Red Hat Smart Management entitlements are required for each Unit of Red Hat Enterprise Linux that is managed by Red Hat Satellite Capsule, Red Hat Satellite Proxy and/or Red Hat Satellite Server. Red Hat Smart Management entitlements may be used with Red Hat Network directly.		
Red Hat Satellite Server Starter Pack	Red Hat does not provide Subscription Services for Red Hat Satellite Server Starter Pack if at the time of renewal, more than 50 Units (whether Systems, Physical Nodes and/or Virtual Nodes) are managed.		

3. Red Hat CloudForms

Red Hat CloudForms Subscriptions are used to manage virtual machines running on on-premise servers or public clouds.

3.1 Entitlements and Purchasing Requirements. You must purchase the appropriate number of Software Subscriptions for each Unit of Red Hat CloudForms based on the capacity of such Unit as described in Table 3.1 below. Multiple Software Subscriptions may be "stacked" to account for the capacity of a given Unit subject to certain limitations. "Stacking" (or "Stackable") means the application of more than one of the same Subscription to account for additional capacity. For purposes of this Exhibit 1.H, a "Socket-pair" is up to two sockets each occupied by a CPU on a Physical Node. For Virtual Nodes being managed by CloudForms in a CloudForms enabled public cloud, you need to purchase Units equal to either (at your option), (a) the actual number of Units or (b) the average daily maximum Virtual Nodes managed by CloudForms in the previous 365 days. If 365 days of usage history is not available, you may use the average usage history period that is available. You must confirm that a specific public cloud is a Red Hat CloudForms enabled cloud prior to purchasing.

Table 3.1

		Unit of Measure	Capacity		
Software Subscription	Support Level		Socket(s)	Managed Nodes	Stackable
Red Hat CloudForms	Standard	Managed Node (Physical Node	'	each Physical de	Physical Node: Yes
	or Premium	or Virtual Node)	Sixteen (16)	or Virtual Nodes	Virtual Node: Yes

3.2 Supported Use Cases. Subscription Services are provided for Software only when used for its supported purpose ("Use Case") in accordance with the terms of this Exhibit 1.H and Table 3.2 below.

Table 3.2

Table 3.2	
Software Subscription	Use Case
Red Hat CloudForms	Red Hat does not provide Subscription Services for Red Hat CloudForms Software
	when used on a System or Physical Node that is not a server. Red Hat Enterprise
	Linux Server is supported solely for the purpose of running Red Hat CloudForms
	Software. Red Hat Enterprise Linux is currently the only supported operating
	system for Red Hat CloudForms Subscriptions.
	Red Hat provides Production Support for Red Hat CloudForms Software
	Subscriptions with Virtual Nodes only if they are running with a Red Hat
Red Hat CloudForms Virtual Nodes	CloudForms enabled cloud. Red Hat Enterprise Linux Server is supported solely
	for the purpose of running Red Hat CloudForms Software. Red Hat Enterprise
	Linux is currently the only supported operating system for Red Hat CloudForms
	Subscriptions

4. Ansible Tower Subscriptions

"Tower Software" means the Ansible Tower branded program that is the graphical application and REST API that is provided in object code only in the form of a downloadable suite, with add-ons, commands, functions and applications that is designed for use with the Core Software (defined below). Tower Software (a) is separate and distinct from, does not include, and is not a derivative of, the Core Software (b) does not include modules or packages licensed under an open source license that may be made available with the Tower Software and (c) is licensed for use during the term of the Ansible Tower Software Subscriptions. "Core Software" means the Ansible open source software that is an application deployment and configuration management engine. You are responsible for downloading, installing and maintaining the Core Software as a prerequisite to the installation and support of the Tower Software.

- **4.1 Entitlements and Purchasing Requirements.** You must purchase the appropriate number of Software Subscription(s) based on the number of Managed Nodes.
- **4.2** Supported Use Cases. Subscription Services are provided for Tower Software only when used for its supported purpose ("Use Case") in accordance with the terms of this Exhibit 1.H and Table 4.2 below.

Table 4.2

UDIO TIE			
Software Subscription	Use Case		
	Red Hat does not provide Subscription Services for Software (a) when used on a		
Ansible Tower	system that is not a server, (b) on platforms that are not Supported Platforms and (c)		
	that is outside of the supported Ansible Tower Life Cycle. The Support of Tower		
	Software includes assistance with Core Software solely to the extent required to run		
	Tower Software.		

- 4.3 Data Analytics. Tower Software versions 2.4 or later may collect and transmit usability data (including information identifying the source of that data) to Red Hat. Red Hat intends to use the data to enhance future releases of the Tower Software and help streamline customer experience and success. Usability data includes information such as dashboard items clicked in the Tower Software, amount of time spent on individual pages and paths taken throughout the Tower Software. Usability data is collected and transmitted to Red Hat via a javascript file that is downloaded to a customer's web-browser. The collection and transmission of such usability data is optional and you may (a) completely opt-out by editing the Tower Software configuration and restarting the Tower Software, or (b) choose between two opt-in scenarios: (i) "anonymous mode" that will provide usability data to Red Hat without any information identifying the source of that data, or (ii) "detail mode" that will provide usability data with the customer name to Red Hat. For Tower Software (versions 2.4 or later) you may opt-out from usability data collection and transmission by following the directions found at: http://docs.ansible.com/ansible-tower/latest/html/administration/usability data collection.html.
- 4.4 Ansible Tower Software Life Cycle. The release status of the Tower Software is defined by version. During the term of the Tower Subscription and subject to payment of the Fees, Red Hat will provide you with Software Maintenance for the Tower Software, if and when available. An "Upgrade" shall mean each new version of the Tower Software that includes significant improvements in functionality and is generally designated by an increase in the version number to the left of the decimal point (e.g., version 2.0 to 3.0). An "Update" shall mean each new revision of the Tower Software that includes minor improvements in functionality and an accumulation of corrections and is generally designated by an increase in the version number to the right of the decimal point (e.g., version 2.1 to 2.2). A "Correction" shall mean a correction of any Upgrade or Update that includes only specific, targeted fixes to discrete problems in the use or functionality of the Tower Software.

Red Hat will provide (a) Support and Software Maintenance for each version of Tower Software for a minimum period of twelve (12) months after the next Update; and (b) Corrections, if and when available, to the current version (including Updates and Upgrades) of Tower Software and the previous version (including Updates and Upgrades). For example, if the 3.2 version is the latest version of Tower Software, Red Hat will post Corrections, if and when available, for versions 3.1 and 3.2.

5. Red Hat Directory Server Software Subscriptions

The Service Level(s) (set forth in Appendix 1, Section 2) for Directory Server is determined by the Service Level of the Red Hat Enterprise Linux Subscription for the System, Physical Node or Virtual Node running Directory Server (for example, if the Service Level for the underlying Red Hat Enterprise Linux Software Subscription is Premium, then Directory Server would receive Premium level support).

5.1 Red Hat Directory Server Use Cases. Subscription Services are provided for Red Hat Directory Server only when used for its supported Use Case in accordance with the terms of this Exhibit 1.H and Table 5.1 below.

Table 5.1

Software	Use Case
Red Hat Directory Server	A Replica Red Hat Directory Server must have an active Software Subscription for a Master Red Hat Directory Server and Red Hat Directory Server must be installed on a physical server with a standard Red Hat Enterprise Linux Software Subscription (not a Red Hat Enterprise Linux Desktop, Red Hat Enterprise Linux for HPC or Red Hat Enterprise Linux Workstation Software Subscription). "Replica" means a second instance of a Directory Server configured as a slave to the first instance of Directory Server. Red Hat Enterprise Linux Server is supported solely for the purpose of running Red Hat Directory Server Software.

EXHIBIT 1.I CLOUD ACCESS



1. Background

This Exhibit 1.I, establishes the terms and conditions under which you may use Software Subscriptions in a Vendor's Cloud, which are in addition to the terms provided by the Vendor. "Vendor" means the Red Hat authorized third party from whom you purchase Cloud services and who is authorized by Red Hat to participate in this Cloud Access Program. "Cloud" means a Vendor's hosted computing infrastructure that provides systems, virtual machines or container hosts to end users on an on-demand basis.

2. Transfer of Software Subscriptions

- 2.1 Eligible Subscriptions. You may use certain eligible Software Subscriptions that include Production Support and/or Software Maintenance provided by Red Hat that meet the criteria set forth at www.redhat.com/solutions/cloud/access ("Eligible Subscriptions") (and if transferred for use in a Vendor's Cloud "Bring Your Own Subscription" or "BYOS") under the terms set forth in this Exhibit 1.1 ("Cloud Access"). Certain software components or functionality of the Software contained in the original Software Subscription (or Add-on Subscription) may not be available or supported when used in the Vendor's Cloud.
- **2.2 Transfer of Eligible Subscriptions.** You may transfer Eligible Subscriptions for use in a Vendor's Cloud under the Cloud Access program provided (a) you complete the registration set forth at https://engage.redhat.com/forms/cloud-access-registration and (b) you have a sufficient number of Eligible Subscriptions to transfer.
- 2.3 Unit Conversion. For purposes of this Cloud Access Exhibit 1.I and for Eligible Subscriptions transferred to a Vendor's Cloud, the Unit of measurement for an Eligible Subscription purchased for on-premise use will be the Unit of measurement for a BYOS Unit as set forth at the conversion table located at http://www.redhat.com/en/technologies/cloud-computing/cloud-access. For those Eligible Subscriptions that were originally sold for use in a Vendor's Cloud, no conversion is required. The number of simultaneous Cloud Access Units in the Vendor Cloud will not exceed the total number of Units (a) transferred from Eligible Subscriptions and/or (b) purchased for use in a Vendor Cloud.
- 2.4 Usage Reporting. You consent to the Vendor reporting to Red Hat your usage of the Red Hat Software Subscriptions in the Vendor's Cloud.
- 2.5 Subscription Term. The transfer of Software Subscription(s) to Cloud Access does not change the start date or the duration of the original Software Subscription(s) and once your Software Subscription expires, your access to the Software Subscription in the Vendor's Cloud will cease, unless otherwise renewed. You may renew your Software Subscription with Red Hat directly or an authorized partner.

3. Services

- 3.1 Terms of Service. In a Cloud environment, Red Hat's Software Subscriptions may provide you with access to the Software and associated Software Maintenance, if and when available, in the form of software images deployed as virtual instances or containers. Payments to Red Hat for Software Subscriptions do not include any fees that may be due to the Vendor for the Vendor's Cloud services. Red Hat is not a party to your agreement with the Vendor and is not responsible for providing access to the Vendor's Cloud or any other obligations of the Vendor under such agreement. The Vendor is solely responsible and liable for the Vendor's Cloud. You may use the Services only for your own internal use within the Vendor's Cloud. Use of the Software Subscription other than as set forth herein, including either access to the Software and/or Services outside the Vendor Cloud will be subject to additional fees as set forth in Section 5 below. Red Hat may have a support relationship with your Vendor that enables Red Hat and Vendor to collaborate regarding Software Subscriptions on the Vendor's Cloud and you consent to (i) Red Hat working on and discussing your Software Subscriptions with Vendor and (ii) sharing of information between Red Hat and Vendor for the purpose of providing Services.
- 3.2 Software Access and Software Maintenance. Software images and/or updates to the Software, if and when available, may be (a) made available in the form of new images and via the Vendor's Cloud ("Gold Image"), (b) transferred by you to a Cloud and/or (c) made available to you via a Red Hat Portal. Certain information (such as Software related notices) may only be available to you via the Red Hat Portal.
- **3.3 Production Support.** Production Support for each Eligible Subscription under Cloud Access will be provided to you by Red Hat pursuant to the terms of the original Software Subscription.
- 3.4 Vendor Specific Services. The Vendor may offer specific services, offerings or protections related to its Cloud, including but not limited to the provision of Services by US only personnel, compliance with certain regulations or regimes or other such Vendor Cloud specific obligations ("Vendor Offerings"). Other than as specifically agreed to in writing, the Software Subscriptions are not provided subject to the terms of those Vendor Offerings, and any Vendor Offerings solely relate to the Cloud itself and not to the Red Hat Software Subscriptions operated on the Cloud. As between Red Hat and you, you are solely responsible for complying with any applicable export laws or regulations related to your use of the Software Subscriptions and you agree not to transmit information, data or technology governed by the International Traffic in Arms Regulations to Red Hat in the course of your use of the Software Subscriptions. You acknowledge and agree that to provide the Services, it may be necessary for Client Information (defined in the Agreement) to be transferred between Red Hat, its Affiliates, Business Partners, and/or subcontractors, which may be located worldwide.

4. Reporting and Inspection

If you use the Software and/or Services outside the Vendor's Cloud, you are required to purchase Subscription Services in a quantity equal to the total number of Units of that Red Hat Product (including variants or components thereof) that you deploy, install, use or execute as set forth in Appendix 1. You will promptly notify Red Hat and Red Hat will invoice you for each Unit on a pro-rata basis and you will pay for such Units within thirty (30) days of the date of invoice or as otherwise set forth in the Agreement. Failure to comply with this Section 4 will be considered a material breach of this Agreement, and will entitle Red Hat and/or Vendor to suspend the Services or terminate this Agreement.

5. Term and Termination

Red Hat may terminate the availability of Cloud Access as an offering or may terminate the availability of a particular Vendor that offers Cloud Access with sixty (60) day notice, provided however you may continue to use the Software Subscription for the remainder of the term of the Software Subscription on another Vendor's Cloud or on your premises under the original terms of the Software Subscription.

EXHIBIT 1.J

RED HAT OPENSHIFT CONTAINER PLATFORM SUBSCRIPTIONS



- 1. Red Hat OpenShift Container Platform Subscriptions
- 1.1 Unit of Measure and Purchasing Requirements for Red Hat OpenShift Container Platform. You must purchase the appropriate number and type of Software Subscription(s) for each Unit of Red Hat OpenShift Container Platform on your premise or elsewhere based on the capacity of such Unit as described in Table 1 below. Multiple Software Subscriptions may be "stacked" to account for the capacity of a given Unit. "Stacking" (or "Stackable") means the application of more than one of the same Subscription to account for additional capacity. Red Hat OpenShift Container Platform for RHEL and Container Platform for RHEL are layered products and require a separate paid and active Software Subscription Red Hat Enterprise Linux for Virtual Datacenters with matching Support Levels for each Unit that deploys, installs, uses or executes such layered products.

Table 1

Software	Support	Unit of	F Capacity		Stackable
Subscription	Level	Measure	Socket(s)	Virtual Nodes	Stackable
Red Hat OpenShift Container Platform	Standard or Premium	Virtual Guest	2 Cores	One Virtual Guest	Cores: Yes Virtual Guest: Yes
Red Hat OpenShift Container Platform	Standard or Premium	Physical Node	Socket-pair	Unlimited Virtual Guests	Physical Node: Yes Virtual Guest: N/A
Red Hat OpenShift Container Platform for RHEL	Standard or Premium	Physical Node	Socket-pair	Unlimited Virtual Guests	Physical Node: Yes Virtual Guest: N/A
Container Platform for RHEL	Standard or Premium	Physical Node	Socket-pair	Unlimited Virtual Guests	Physical Node: Yes Virtual Guest: N/A

For purposes of this Exhibit 1.J, a "Socket-pair" is up to two sockets each occupied by a CPU on a Physical Node.

- 1.2 Red Hat OpenShift Container Platform Optional Offerings. Red Hat OpenShift Container Platform Subscriptions may be purchased with one or more optional offerings that require a separate paid and active Software Subscription(s) for each Physical Node and/or Virtual Guest running such offerings such as Red Hat JBoss Middleware for OpenShift Container Platform. A standard Red Hat JBoss Middleware Software Subscription is not configured for use with Red Hat OpenShift Container Platform, but Red Hat JBoss Middleware subscribers have the flexibility to deploy either a standard Red Hat JBoss Middleware Software Subscription or a Red Hat JBoss Middleware for OpenShift Container Platform with each subscription.
- 2. Red Hat OpenShift Container Platform Services and Use Cases

Subscription Services are provided for Red Hat OpenShift Container Platform only when used for its supported purpose ("Use Case") in accordance with the terms of this Exhibit 1.J and Table 2 below.

Table 2

Software Subscription	Use Case
Red Hat OpenShift Container Platform	Red Hat OpenShift Container Platform is intended to be used as a platform as a service and will be supported only when used in that capacity. Red Hat OpenShift Container Platform is not supported on non-server hardware such as desktops or workstations. Red Hat OpenShift Container Platform is intended for use on a dedicated Physical Node or Virtual Guest; running other applications and/or programs of any type on the Physical Node or Virtual Guest can have a negative impact on the function and/or performance. Red Hat JBoss Middleware will be supported in accordance with the terms of Exhibit 1.B.