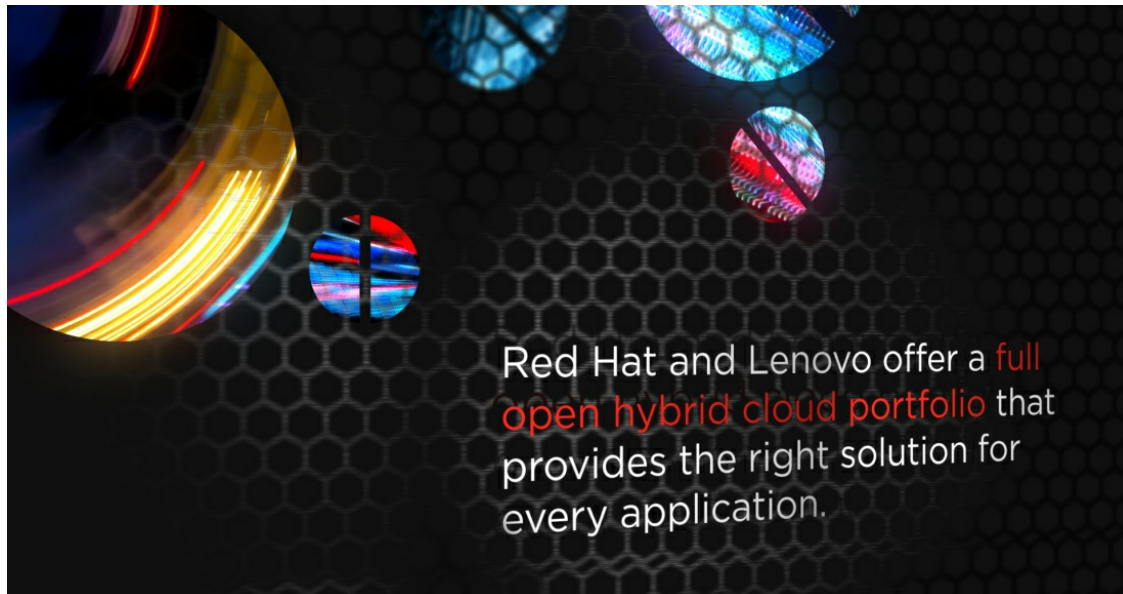


Red Hat Software Solution Product Guide

Product Guide

Red Hat and Lenovo have been partners for over 20 years. Together we ensure that the latest Red Hat technologies work perfectly with Lenovo ThinkSystem infrastructure and ThinkAgile solutions to provide the most reliable, secure and high-performing datacenters for our customers. Built with proven Lenovo innovation, Lenovo ThinkSystem servers and ThinkAgile solutions extend Red Hat's operating systems, virtualization technologies, and infrastructure platforms so you can build a highly productive IT environment that can help your business achieve true innovation.

Lenovo has proven experience in developing and delivering Red Hat-based solutions that help customers modernize and simplify their IT infrastructure to dramatically drive down operating costs and open the door to cutting-edge innovations. Built around the latest Lenovo ThinkSystem servers and networking hardware, the Lenovo solution with Red Hat provides businesses with an affordable, interoperable, and reliable industry-leading solution to manage their virtualized workloads.



Did you know?

Lenovo XClarity Administrator is a centralized resource management solution that is aimed at reducing complexity, speeding response, and enhancing the availability of Lenovo server systems and solutions. Lenovo XClarity Administrator provides agent-free hardware management for our servers, storage, network switches, hyperconverged and ThinkAgile solutions.

For more information, refer to the Lenovo XClarity Administrator Product Guide, available from: <https://lenovopress.com/tips1200-lenovo-xclarity-administrator>

Why buy Red Hat subscriptions from Lenovo?

Lenovo offers various types and forms of Red Hat subscriptions so organizations and partners can leverage best in class Lenovo servers to build agile IT infrastructure that is reliable, secure, and high performing. Choosing a Red Hat OEM subscription from Lenovo for most customers is the *simplest* and *most cost-effective* approach.

Red Hat subscriptions from Lenovo are specifically pre-tested and optimized to install on Lenovo servers. Lenovo offers support for several Red Hat offerings including Red Hat Enterprise Linux, Red Hat Virtualization, and Red Hat High-Performance Computing, giving customers a single point of support for their datacenter with better pricing than they can get from normal Red Hat distributors.

With the two company headquarters located near each other and a history of technical collaboration, Red Hat and Lenovo consistently deliver innovative joint solutions for the data center. Lenovo's leadership in reliability, customer satisfaction, and performance, combined with Red Hat's reputation in software and cloud, continues to deliver innovative data-center solutions and lower total cost of ownership for our joint customers.

With Lenovo, customers have access to decades of datacenter expertise, industry leading support services and the option to leverage Lenovo consultative, professional, and managed service offerings. Lenovo provides customers with the best solution to generate the business results they are looking to achieve, while leveraging a single partner for all aspects of support and services.

Linux Operating System and Hypervisor

This section describes the subscriptions available for Red Hat Enterprise Linux and a hypervisor provided via Red Hat Virtualization supported by world-class Lenovo Services.

Red Hat Enterprise Linux Operating System is available in the following deployment scenarios:

- **Red Hat Enterprise Linux (RHEL) Physical or Virtual Node:** This is the basic RHEL x86 Linux Operating System is sold in a single 2-socket subscription. This subscription supports either two (2) physical sockets of RHEL or two (2) virtual machines using RHEL.
- **Red Hat Enterprise Linux Server Physical with 1 Virtual Node:** This subscription provides the physical two socket RHEL OS plus an additional VM using RHEL.
- **Red Hat Enterprise Linux Server Physical with 4 Virtual Nodes:** This subscription provides the physical two socket RHEL OS plus up to four additional RHEL VMs.
- **Red Hat Enterprise Linux for Virtual Datacenters:** This subscription offers unlimited "bare metal" RHEL OS instances for virtual machines. Note - this subscription does not include the physical server OS.
- **Red Hat Virtualization:** This is the Red Hat hypervisor (KVM-based) for highly virtualized and software defined datacenter environments. This subscription does not include Virtual Machine guest OS. Please add Red Hat Enterprise Linux for Virtual Datacenters for unlimited RHEL VM guest capability.

Customers can purchase Red Hat Enterprise Linux subscriptions from Lenovo through the following ways:

- **CTO (Configure to Order)** – this is the OEM subscription that is added to the Lenovo server quotes.
 - Socket-based per Server
- **BTO (Build to Order)** – this is the OEM subscription that can be added to any customer quotes.
 - Socket-based per Server

Each RHEL OS subscription can provide an OS instance for up to two sockets or two virtual machines. Other options include the physical server OS plus one or four virtual machines as well as unlimited RHEL virtual machines.

Red Hat Enterprise subscriptions with Lenovo support

The following table lists the subscriptions available for Red Hat Enterprise Linux with Lenovo support.

Table 1. Red Hat Enterprise Linux Subscriptions

Subscription	Licensing model	Notes
RHEL Server Physical or Virtual Node	Processor-based	2 sockets or 2 VMs
RHEL Server Physical w/ 1 Virtual Node	Processor-based	2 physical sockets plus 1 VM
RHEL Server Physical w/ 4 Virtual Nodes	Processor-based	2 physical sockets plus 4 VM
RHEL for Virtual Datacenter	Processor-based	Unlimited RHEL OS VMs
Red Hat Virtualization	Processor-based	Hypervisor (does not include OS)

The following table lists the feature codes for ordering Red Hat Enterprise Linux and Hypervisor.

Table 2. Red Hat Enterprise Linux and Hypervisor feature codes

Description	Feature code
RHEL Server Physical or Virtual Node, 2 Skt Standard Subscription w/Lenovo Support 1Yr	S0N5
RHEL Server Physical or Virtual Node, 2 Skt Standard Subscription w/Lenovo Support 3Yr	S0N6
RHEL Server Physical or Virtual Node, 2 Skt Standard Subscription w/Lenovo Support 5Yr	S0N7
RHEL Server Physical or Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 1Yr	S0N8
RHEL Server Physical or Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 3Yr	S0N9
RHEL Server Physical or Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 5Yr	S0NA
RHEL Server Physical w/up to 1 Virtual Node, 2 Skt Standard Subscription w/Lenovo Support 1Yr	S0NB
RHEL Server Physical w/up to 1 Virtual Node, 2 Skt Standard Subscription w/Lenovo Support 3Yr	S0NC
RHEL Server Physical w/up to 1 Virtual Node, 2 Skt Standard Subscription w/Lenovo Support 5Yr	S0ND
RHEL Server Physical w/up to 1 Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 1Yr	S0NE
RHEL Server Physical w/up to 1 Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 3Yr	S0NF
RHEL Server Physical w/up to 1 Virtual Node, 2 Skt Premium Subscription w/Lenovo Support 5Yr	S0NG
RHEL Server Physical w/up to 4 Virtual Nodes, 2 Skt Standard Subscription w/Lenovo Support 1Yr	S0NH
RHEL Server Physical w/up to 4 Virtual Nodes, 2 Skt Standard Subscription w/Lenovo Support 3Yr	S0NJ
RHEL Server Physical w/up to 4 Virtual Nodes, 2 Skt Standard Subscription w/Lenovo Support 5Yr	S0NK
RHEL Server Physical w/up to 4 Virtual Nodes, 2 Skt Premium Subscription w/Lenovo Support 1Yr	S0NL
RHEL Server Physical w/up to 4 Virtual Nodes, 2 Skt Premium Subscription w/Lenovo Support 3Yr	S0NM
RHEL Server Physical w/up to 4 Virtual Nodes, 2 Skt Premium Subscription w/Lenovo Support 5Yr	S0NN
RHEL for Virtual Datacenters, 2 Skt Standard Subscription w/Lenovo Support 1Yr	S0NP
RHEL for Virtual Datacenters, 2 Skt Standard Subscription w/Lenovo Support 3Yr	S0NQ
RHEL for Virtual Datacenters, 2 Skt Standard Subscription w/Lenovo Support 5Yr	S0NR
RHEL for Virtual Datacenters, 2 Skt Premium Subscription w/Lenovo Support 1Yr	S0NS
RHEL for Virtual Datacenters, 2 Skt Premium Subscription w/Lenovo Support 3Yr	S0NT
RHEL for Virtual Datacenters, 2 Skt Premium Subscription w/Lenovo Support 5Yr	S0NU
Red Hat Enterprise Virtualization, 2 Skt Standard Subscription w/Lenovo Support 1Yr	S0P1
Red Hat Enterprise Virtualization, 2 Skt Standard Subscription w/Lenovo Support 3Yr	S0P2
Red Hat Enterprise Virtualization, 2 Skt Standard Subscription w/Lenovo Support 5Yr	S0P3
Red Hat Enterprise Virtualization, 2 Skt Premium Subscription w/Lenovo Support 1Yr	S0P4

Description	Feature code
Red Hat Enterprise Virtualization, 2 Skt Premium Subscription w/Lenovo Support 3Yr	S0P5
Red Hat Enterprise Virtualization, 2 Skt Premium Subscription w/Lenovo Support 5Yr	S0P6

Red Hat Enterprise subscriptions with Red Hat support

The following table is a list of additional subscriptions available for sell by Lenovo that come with only Red Hat support. Customers must call Red Hat directly for any software related issues. These are “duplicate” subscriptions of those previously listed in this document offering Lenovo Support (referred to as “OEM” subscriptions).

Table 3. Additional Red Hat subscriptions

Description	Feature code
Red Hat Enterprise Linux Operating System	
RHEL Server Physical or Virtual Node, 2 Skt Prem RH Sup 1Yr	2019
RHEL Server Physical or Virtual Node, 2 Skt Prem RH Sup 3Yr	2020
RHEL Server Physical or Virtual Node, 2 Skt Std RH Sup 1Yr	2021
RHEL Server Physical or Virtual Node, 2 Skt Std RH Sup 3Yr	2022
RHEL Smart Management Unlimited Guests, 2 Skt RH Sup 1Yr	2008
RHEL Smart Management Unlimited Guests, 2 Skt RH Sup 3Yr	2009
Red Hat Hypervisor	
Red Hat Enterprise Virtualization, 2 Skt Std RH Sup 1Yr	2055
Red Hat Enterprise Virtualization, 2 Skt Std RH Sup 3Yr	2056
Red Hat Enterprise Virtualization, 2 Skt Prem RH Sup 1Yr	2053
Red Hat Enterprise Virtualization, 2 Skt Prem RH Sup 3Yr	2054
High Performance Computing	
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Support 1Yr	B1XK
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Support 3Yr	B1XL
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Support w/EUS 1Yr	B1XM
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Support w/EUS 3Yr	B1XN
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt. 2 Skt Prem RH Sup 1Yr	B1XF
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt. 2 Skt Prem RH Sup 3Yr	B1XG
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt. 2 Skt Std RH Sup 1Yr	B1XH
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt. 2 Skt Std RH Sup 3Yr	B1XJ
Extended Support	
RHEL Extended Update Support Unlimited Guests, 2 Skt RH Sup 1Yr	1863
RHEL Extended Update Support Unlimited Guests, 2 Skt RH Sup 3Yr	1864
RHEL Extended Update Support, 2 Skt RH Sup 1Yr	1871
RHEL Extended Update Support, 2 Skt RH Sup 3Yr	1872
Red Hat Enterprise Linux Virtual Machines (unlimited)	
RHEL for Virtual Datacenters, 2 Skt Prem RH Sup 1Yr	2042
RHEL for Virtual Datacenters, 2 Skt Prem RH Sup 3Yr	2043
RHEL for Virtual Datacenters, 2 Skt Std RH Sup 1Yr	2044
RHEL for Virtual Datacenters, 2 Skt Std RH Sup 3Yr	2045

Description	Feature code
Red Hat Add-Ons	
RHEL High Availability Unlimited Guests, 2 Skt RH Sup 1Yr	1941
RHEL High Availability Unlimited Guests, 2 Skt RH Sup 3Yr	1942
RHEL High Availability, 2 Skt RH Sup 1Yr	1936
RHEL High Availability, 2 Skt RH Sup 3Yr	1937
RHEL Resilient Storage Unlimited Guests, 2 Skt RH Sup 1Yr	1963
RHEL Resilient Storage Unlimited Guests, 2 Skt RH Sup 3Yr	1964
RHEL Resilient Storage, 2 Skt RH Sup 1Yr	1958
RHEL Resilient Storage, 2 Skt RH Sup 3Yr	1959
RHEL Smart Management, 2 Skt RH Sup 1Yr	2003
RHEL Smart Management, 2 Skt RH Sup 3Yr	2004
RHEL Extended Life Cycle Support, Physical or Virtual, RH Support 1 Yr	M2S6V8
RHEL Extended Life Cycle Support, Unlimited Guests, RH Support 1 Yr	M2S4V8

Red Hat Enterprise Linux Add-Ons

This section provides information on add-on packages that can be sold with the RHEL Operating System from Lenovo. Any “Add-On” package will adopt the support levels of the underlying server OS (i.e. Standard or Premium support, Lenovo Support or Red Hat Support).

- RHEL High Availability.** RHEL High Availability Add-On allows a service to fail over from one (1) node to another with no apparent interruption to cluster clients, evicting faulty nodes during transfer to prevent data corruption. This Add-On can be configured for most applications (both off-the-shelf and custom) and virtual guests and supports up to 16 nodes. The High Availability Add-On features a cluster manager, lock management, fencing, command-line cluster configuration, and a Conga administration tool. Lenovo resells High Availability by 2-socket server (like RHEL, either two physical sockets or virtual machines). There is also a subscription for unlimited VMs but will be limited to 16 RHEL VMs.
- Red Hat Resilient Storage.** Red Hat Resilient Storage Add-On lets users access the same storage device over a network—using either shared storage or a clustered file system—through a pool of data that's available to each server in a group. Each server in a cluster has direct access to a shared block device over a local storage area network (SAN) of up to 100 terabytes. This Add-On includes the Global File System 2 to support concurrent access, a cluster-wide locking mechanism to arbitrate storage access, a POSIX-compliant file system across 16 nodes, and Clustered Samba or Common Internet File System for Windows environments.
- RHEL Extended Update Support.** RHEL Extended Update Support extends the support period of a Red Hat Enterprise Linux update for approximately two years beyond the standard 7-year life cycle. An Extended Update Support system receives the same updates as the base system until the next minor release, at which point the system tied to this Add-On is restricted to only critical security advisories and prioritized bug fixes. The Extended Update Support Add-On also lets users skip specific Red Hat Enterprise Linux minor releases and instead implement the minor releases of their choosing.
- Red Hat Smart Management.** Red Hat Smart Management combines the flexible and powerful infrastructure management capabilities of Red Hat Satellite with the simplicity of cloud management services for Red Hat Enterprise Linux. It helps you more securely manage any environment supported by Red Hat Enterprise Linux—from physical machines to hybrid multiclouds. Note that Satellite is no longer sold as a stand-alone subscription but is accessible to any Smart Management subscription. Smart Management is typically bundled with other RHEL subscriptions such as HPC.
- RHEL Extended Lifecycle Support.** The Red Hat Enterprise Linux (RHEL) Extended Life Cycle

Support Add-On (ELS) is an offering that provides extended support once a product is retired and has entered the Extended Life Phase allowing customers to continue to receive critical impact security fixes and selected urgent priority bug fixes on a specific major version of Red Hat Enterprise Linux from the end of its regular life cycle for an extended, defined period of time. ELS is only applicable to the last minor release of the given major release.

The following table lists the Red Hat Enterprise Linux Add-On feature codes.

Table 4. Red Hat Enterprise Linux Add-On feature codes

Description	Feature code
RHEL High Availability, 2 Skt Subscription w/Lenovo Support 1Yr	S0P7
RHEL High Availability, 2 Skt Subscription w/Lenovo Support 3Yr	S0P8
RHEL High Availability, 2 Skt Subscription w/Lenovo Support 5Yr	S0P9
RHEL High Availability Unlimited Guests, 2 Skt Subscription w/Lenovo Support 1Yr	S0PA
RHEL High Availability Unlimited Guests, 2 Skt Subscription w/Lenovo Support 3Yr	S0PB
RHEL High Availability Unlimited Guests, 2 Skt Subscription w/Lenovo Support 5Yr	S0PC
RHEL Resilient Storage, 2 Skt Subscription w/Lenovo Support 1Yr	S0PG
RHEL Resilient Storage, 2 Skt Subscription w/Lenovo Support 3Yr	S0PH
RHEL Resilient Storage, 2 Skt Subscription w/Lenovo Support 5Yr	S0PJ
RHEL Resilient Storage Unlimited Guests, 2 Skt Subscription w/Lenovo Support 1Yr	S0PK
RHEL Resilient Storage Unlimited Guests, 2 Skt Subscription w/Lenovo Support 3Yr	S0PL
RHEL Resilient Storage Unlimited Guests, 2 Skt Subscription w/Lenovo Support 5Yr	S0PM
RHEL Extended Update Support, 2 Skt Subscription w/Lenovo Support 1Yr	S0PR
RHEL Extended Update Support, 2 Skt Subscription w/Lenovo Support 3Yr	S0PS
RHEL Extended Update Support Unlimited Guests, 2 Skt Subscription w/Lenovo Support 1Yr	S0PU
RHEL Extended Update Support Unlimited Guests, 2 Skt Subscription w/Lenovo Support 3Yr	S0PV
RHEL Smart Management, 2 Skt Subscription w/Lenovo Support 1Yr	S0PX
RHEL Smart Management, 2 Skt Subscription w/Lenovo Support 3Yr	S0PY
RHEL Smart Management, 2 Skt Subscription w/Lenovo Support 5Yr	S0PZ
RHEL Smart Management Unlimited Guests, 2 Skt Subscription w/Lenovo Support 1Yr	S0Q0
RHEL Smart Management Unlimited Guests, 2 Skt Subscription w/Lenovo Support 3Yr	S0Q1
RHEL Smart Management Unlimited Guests, 2 Skt Subscription w/Lenovo Support 5Yr	S0Q2
Red Hat Ent Linux Extended Life Cycle Support, Physical or Virtual Subscription w/Lenovo Support 1Yr	S0Q3
Red Hat Ent Linux Extended Life Cycle Support, Unlimited Guests Subscription w/Lenovo Support 1Yr	S0Q4

Red Hat Enterprise Linux for HPC

This section provides information on RHEL for HPC from Lenovo. Lenovo is an industry leader in the High-Performance Computing space with 100s of HPC wins using Red Hat Enterprise Linux for HPC in the deployments. Many of the largest super computers are deployed with Lenovo servers and Red Hat HPC software.

For IT professionals with performance is a primary concern, RHEL for HPC provides capabilities to build high performance datacenter environments. These subscriptions are sold by two physical sockets or two virtual machine instances.

- **RHEL for HPC Compute Node.** Lenovo resells RHEL for HPC Compute Node subscriptions with or without Smart Management. These are “self-support” subscriptions where the customers access Red Hat for patches, downloads, software, etc. The support levels are defined by the associated Head Node subscriptions which may be Lenovo or Red Hat support. Options include Standard 10x5 and Premium 24x7 support levels.
- **RHEL for HPC Head Node.** Lenovo resells RHEL for HPC Head Node subscriptions with or without Smart Management included in the bundle. The “Smart Management” Add-On included in the subscription enables you to access the Satellite management tool. Customers can choose industry leading Lenovo technical support for any Red Hat HPC subscriptions.

The following table lists the feature codes for ordering RHEL for HPC.

Table 5. RHEL for HPC feature codes

Description	Feature code
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt, 2 Skt Standard Subs w/Lenovo Support 1Yr	S0NV
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt, 2 Skt Standard Subs w/Lenovo Support 3Yr	S0NW
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt, 2 Skt Standard Subs w/Lenovo Support 5Yr	S0NX
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt, 2 Skt Premium Subs w/Lenovo Support 1Yr	S0NY
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt, 2 Skt Premium Subs w/Lenovo Support 3Yr	S0NZ
RHEL for HPC Head Node w/Smart Mgt, Phy or Virt, 2 Skt Premium Subs w/Lenovo Support 5Yr	S0P0
RHEL for HPC Head Node, Standard (Physical or Virtual Nodes) Lenovo Support 1Yr	S4ML
RHEL for HPC Head Node, Standard (Physical or Virtual Nodes) Lenovo Support 3Yr	S4MM
RHEL for HPC Head Node, Standard (Physical or Virtual Nodes) Lenovo Support 5Yr	S4MN
RHEL for HPC Head Node, Premium (Physical or Virtual Nodes) Lenovo Support 1Yr	S4MH
RHEL for HPC Head Node, Premium (Physical or Virtual Nodes) Lenovo Support 3Yr	S4MJ
RHEL for HPC Head Node, Premium (Physical or Virtual Nodes) Lenovo Support 5Yr	S4MK
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Sup w/EUS, Subs L3 Only 1Yr	B1XC
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Sup w/EUS, Subs L3 Only 3Yr	B1XD
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Sup w/EUS, Subs L3 Only 5Yr	B1XE
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Sup, Subs L3 Only 1Yr	B1X9
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Sup, Subs L3 Only 3Yr	B1XA
RHEL for HPC Compute Node w/Smart Mgt, Phy or Virt, 2 Skt Self Sup, Subs L3 Only 5Yr	B1XB
RHEL for HPC Compute Node, Self-support (Physical or Virtual Node) 1Yr	S4MP
RHEL for HPC Compute Node, Self-support (Physical or Virtual Node) 3Yr	S4MQ
RHEL for HPC Compute Node, Self-support (Physical or Virtual Node) 5Yr	S4MR
RHEL for HPC Compute Node w/EUS, Self-support (Physical or Virtual Node) 1Yr	S4MS
RHEL for HPC Compute Node w/EUS, Self-support (Physical or Virtual Node) 3Yr	S4MT

Description	Feature code
RHEL for HPC Compute Node w/EUS, Self-support (Physical or Virtual Node) 5Yr	S4MU

Red Hat Enterprise Linux for SAP

This section provides information on Red Hat Enterprise Linux for SAP solutions and applications sold from Lenovo. Red Hat offers a subscription called RHEL for SAP Solutions that is used for SAP HANA installations and a separate RHEL for SAP Applications subscription that is used for non-HANA applications such as Business Warehouse. As the number one reseller of SAP HANA servers, Lenovo is well-versed in installing, selling and managing Red Hat based SAP HANA deployments.

- **RHEL for SAP Solutions.** RHEL for SAP Solutions is an attractive, bundled subscription with several Red Hat technologies. This is the subscription required for SAP HANA use cases. This subscription includes Red Hat Insights, Red Hat Enterprise Linux, Red Hat High Availability Add-On and Red Hat Smart Management Add-On. It also has an extended update support of four years included vs the standard support term of two years. Like other RHEL subscriptions, this one offers the two socket or two virtual machine option and the unlimited bare metal virtual machine option (through a Virtual Datacenter SKU).
- **RHEL for SAP Applications.** RHEL for SAP Applications is used for all non-HANA SAP applications. This also comes in the basic two socket / two VM and the unlimited VM option using Virtual Datacenter subscriptions.
- **RHEL for Lenovo Intelligent Insights with SAP Data Hub.** A new offering from Lenovo combines both SAP and Red Hat software products into a powerful data “management” solution that can access data from multiple disparate locations and databases. This product utilizes RHEL, Red Hat Ceph Storage and Red Hat OpenShift Container Platform. You do not need to sell SAP Solutions or SAP Applications for the Data Hub use case.

The following table lists the Red Hat Enterprise Linux for SAP feature codes.

Table 6. Red Hat Enterprise Linux for SAP feature codes

Description	Feature code
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Std RH Sup 1Yr	B1LP
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Std RH Sup 3Yr	B1LQ
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Prem RH Sup 1Yr	B1LR
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Prem RH Sup 3Yr	B1LS
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Std w/Lenovo Support 1Yr	S4MY
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Std w/Lenovo Support 3Yr	S4MZ
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Std w/Lenovo Support 5Yr	S4N0
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Prem w/Lenovo Support 1Yr	S4MV
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Prem w/Lenovo Support 3Yr	S4MW
RHEL for SAP Solutions (HANA) w/SM,HA,Ins,4YrEUS, PhyOrVirt Prem w/Lenovo Support 5Yr	S4MX
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Standard RH Sup 1Yr	B1LT
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Standard RH Sup 3Yr	B1LU
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Prem RH Sup 1Yr	B1LV
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Prem RH Sup 3Yr	B1LW
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Standard w/Lenovo Support 1Yr	S4N4

Description	Feature code
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Standard w/Lenovo Support 3Yr	S4N5
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Standard w/Lenovo Support 5Yr	S4N6
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Prem w/Lenovo Support 1Yr	S4N1
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Prem w/Lenovo Support 3Yr	S4N2
RHEL Virtual Datacenter SAP Solutions (HANA) w/SM,HA,Ins,4YEUS, Prem w/Lenovo Support 5Yr	S4N3
RHEL SAP Apps Smart Management, 2 Skt Prem RH Sup Production 1Yr	1972
RHEL SAP Apps Smart Management, 2 Skt Prem RH Sup Production 3Yr	1973
RHEL SAP Apps Smart Management, 2 Skt Std RH Sup NonProduction 1Yr	1974
RHEL SAP Apps Smart Management, 2 Skt Std RH Sup NonProduction 3Yr	1975
RHEL SAP Apps Virtual Datacenter, 2 Skt Prem RH Sup Production 1Yr	1976
RHEL SAP Apps Virtual Datacenter, 2 Skt Prem RH Sup Production 3Yr	1977
RHEL SAP Apps Virtual Datacenter, 2 Skt Std RH Sup NonProduction 1Yr	1978
RHEL SAP Apps Virtual Datacenter, 2 Skt Std RH Sup NonProduction 3Yr	1979
RHEL SAP Apps, 2 Skt Premium RH Sup Production 1Yr	1968
RHEL SAP Apps, 2 Skt Premium RH Sup Production 3Yr	1969
RHEL SAP Apps, 2 Skt Standard RH Sup NonProduction 1Yr	1970
RHEL SAP Apps, 2 Skt Standard RH Sup NonProduction 3Yr	1971
RHEL SAP Apps Virtual Datacenter SmartMgmt, 2Skt Premium RH Sup Production 1Yr	1994
RHEL SAP Apps Virtual Datacenter SmartMgmt, 2Skt Premium RH Sup Production 3Yr	1995
RHEL SAP Apps Virtual Datacenter SmartMgmt, 2Skt Standard RH Sup Non-Production 1Yr	1996
RHEL SAP Apps Virtual Datacenter SmartMgmt, 2Skt Standard RH Sup Non-Production 3Yr	1997

Red Hat OpenShift

This section provides information on Red Hat OpenShift, Red Hat's container platform. Containers are providing datacenter managers with an excellent tool to support multiple applications via individual "containers" while providing security. Red Hat OpenShift offers a consistent hybrid cloud foundation for building and scaling containerized applications. Benefit from streamlined platform installation and upgrades from one of the enterprise Kubernetes leaders.

Red Hat OpenShift gives administrators a single place to implement and enforce policies across multiple teams, with a unified console across all Red Hat OpenShift clusters. Red Hat OpenShift builds security checks into your container stack—starting with Red Hat Enterprise Linux and continuing throughout the application lifecycle.

- **Red Hat OpenShift Container Platform.** Red Hat OpenShift Container Platform is a bundled subscription that includes RHEL OS, Ansible and OpenShift (containers). Unlike other subscriptions, Red Hat OpenShift Container Platform is sold by cores, not by sockets or VMs. The lowest cost option is a two-core subscription. Like all Red Hat subscriptions, support is either 10x5 Standard or 24x7 Premium. These subscriptions only offer Red Hat support.
- **Red Hat OpenShift Data Foundation.** Red Hat OpenShift Data Foundation is software-defined storage for containers. Engineered as the data and storage services platform for Red Hat OpenShift,

Red Hat OpenShift Container Storage helps teams develop and deploy applications quickly and efficiently across clouds. This is offered with two sku options Essentials and Advanced SKU carries additional capability with granular encryption -w/ KMS support, Wan DR, and Metro HA & DR Stretch Clusters capability.

- **Red Hat Advanced Cluster Management for Kubernetes.** Red Hat Advanced Cluster Management for Kubernetes controls clusters and applications from a single console, with built-in security policies. Extend the value of Red Hat OpenShift by deploying apps, managing multiple clusters, and enforcing policies across multiple clusters at scale.

The following table lists the feature codes to order Red Hat OpenShift.

Table 7. Red Hat OpenShift feature codes

Description	Feature code
Virtualized/Cloud deployments	
Red Hat OpenShift Container Platform, 2 Cores Prem RH Sup 1 Yr	S066
Red Hat OpenShift Container Platform, 2 Cores Prem RH Sup 3 Yr	S067
Red Hat OpenShift Container Platform, 2 Cores Std RH Sup 1 Yr	S068
Red Hat OpenShift Container Platform, 2 Cores Std RH Sup 3 Yr	S069
Red Hat OpenShift Container Platform, 16 Cores or 32vCPU, Prem RH Sup 1 Yr	S06A
Red Hat OpenShift Container Platform, 16 Cores or 32vCPU, Prem RH Sup 3 Yr	S06B
Red Hat OpenShift Container Platform, 16 Cores or 32vCPU, Std RH Sup 1 Yr	S06C
Red Hat OpenShift Container Platform, 16 Cores or 32vCPU, Std RH Sup 3 Yr	S06D
Red Hat OpenShift Data Foundation, 2 Cores Std RH Sup 1 Yr	S4MF
Red Hat OpenShift Data Foundation, 2 Cores Std RH Sup 3 Yr	S4MG
Red Hat OpenShift Data Foundation, 2 Cores Prem RH Sup 1 Yr	S4MD
Red Hat OpenShift Data Foundation, 2 Cores Prem RH Sup 3Yr	S4ME
Bare Metal deployments	
Red Hat OpenShift Container Platform (Bare Metal Node), 1-2 sockets Prem RH Sup 1 Yr	S6EC
Red Hat OpenShift Container Platform (Bare Metal Node), 1-2 sockets Prem RH Sup 3 Yr	S6EN
Red Hat OpenShift Container Platform (Bare Metal Node), 1-2 sockets Std RH Sup 1 Yr	S068
Red Hat OpenShift Container Platform (Bare Metal Node), 1-2 sockets Std RH Sup 3 Yr	S6EP
Red Hat OpenShift Kubernetes Engine (Bare Metal Node), 1-2 sockets Prem RH Sup 1 Yr	S6EE
Red Hat OpenShift Kubernetes Engine (Bare Metal Node), 1-2 sockets Prem RH Sup 3 Yr	S6EQ
Red Hat OpenShift Kubernetes Engine (Bare Metal Node), 1-2 sockets Std RH Sup 1 Yr	S6EF
Red Hat OpenShift Kubernetes Engine (Bare Metal Node), 1-2 sockets Std RH Sup 3 Yr	S6ER
Red Hat Advanced Cluster Management for Kubernetes (Bare Metal Node), 1-2 sockets Prem RH Sup 1 Yr	S6EA
Red Hat Advanced Cluster Management for Kubernetes (Bare Metal Node), 1-2 sockets Prem RH Sup 3 Yr	S6EL
Red Hat Advanced Cluster Management for Kubernetes (Bare Metal Node), 1-2 sockets Std RH Sup 1 Yr	S6EB
Red Hat Advanced Cluster Management for Kubernetes (Bare Metal Node), 1-2 sockets Std RH Sup 3 Yr	S6EM
Red Hat OpenShift Data Foundation Essentials (Bare Metal), 1-2 sockets up to 64 cores Prem RH Sup 1 Yr	S6EG

Description	Feature code
Red Hat OpenShift Data Foundation Essentials (Bare Metal), 1-2 sockets up to 64 cores Prem RH Sup 3 Yr	S6ES
Red Hat OpenShift Data Foundation Essentials (Bare Metal), 1-2 sockets up to 64 cores Std RH Sup 1 Yr	S6EH
Red Hat OpenShift Data Foundation Essentials (Bare Metal), 1-2 sockets up to 64 cores Std RH Sup 3 Yr	S6ET
Red Hat OpenShift Data Foundation Advanced (Bare Metal), 1-2 sockets up to 64 cores Prem RH Sup 1 Yr	S6EJ
Red Hat OpenShift Data Foundation Advanced (Bare Metal), 1-2 sockets up to 64 cores Prem RH Sup 3 Yr	S6EU
Red Hat OpenShift Data Foundation Advanced (Bare Metal), 1-2 sockets up to 64 cores Std RH Sup 1 Yr	S6EK
Red Hat OpenShift Data Foundation Advanced (Bare Metal), 1-2 sockets up to 64 cores Std RH Sup 3 Yr	S6EV

Red Hat Cloud

This section provides information on Red Hat “cloud” products that include OpenStack.

- Red Hat OpenStack Platform.** Red Hat OpenStack Platform maintains high availability and policy driven measures, including infrastructure failure recognition, automated host node evacuation, and downed node fencing. It also automatically restarts workloads on remaining available hosts. This subscription is a bundle of RHEL, Red Hat Virtualization and OpenStack. The OpenStack Platform Controller Node “no guest” simply deletes the RHEL OS from the bundle for customers that want to add Red Hat OpenStack onto another vendor OS or already have RHEL OS installed on the server.

The following table lists the Red Hat Cloud feature codes.

Table 8. Red Hat Cloud subscription feature codes

Description	Feature code
RHEL OpenStack Platform, 2 Skt Std RH Sup 1Yr	2120
RHEL OpenStack Platform, 2 Skt Prem RH Sup 3Yr	2119
RHEL OpenStack Platform Controller Nodes, no guests, 2Skt Std RHSup 1Yr	2116
RHEL OpenStack Platform Controller Nodes, no guests, 2Skt Std RHSup 3Yr	2117
RHEL OpenStack Platform Controller Nodes, no guests, 2Skt Prem RHSup 1Yr	2114
RHEL OpenStack Platform Controller Nodes, no guests, 2Skt Prem RHSup 3Yr	2115

Red Hat Storage

This section provides information on Red Hat Storage products. This portfolio contains object and file storage solutions contained in Red Hat Ceph Storage.

- **Red Hat Ceph Storage.** Red Hat Ceph Storage is an open, massively scalable storage solution for modern workloads like cloud infrastructure, data analytics, media repositories, and backup and restore systems. Red Hat Ceph Storage delivers software-defined storage on your choice of industry-standard hardware. With block, object, and file storage combined into one platform, Red Hat Ceph Storage efficiently and automatically manages all your data. Red Hat Ceph subscriptions are sold by both number of nodes and capacity in TBs.

The following table lists the feature codes to order a Red Hat Storage subscription.

Table 9. Red Hat Storage subscription feature codes

Description	Feature code
Red Hat Ceph Storage, 12 Physical Nodes up to 256TB, Prem RH Sup 1Yr	2102
Red Hat Ceph Storage, 12 Physical Nodes up to 256TB, Prem RH Sup 3Yr	2103
Red Hat Ceph Storage, 25 Physical Nodes up to 512TB, Prem RH Sup 1Yr	2104
Red Hat Ceph Storage, 25 Physical Nodes up to 512TB, Prem RH Sup 3Yr	2105
Red Hat Ceph Storage, 50 Physical Nodes up to 1 PB, Prem RH Sup 1Yr	B1LZ
Red Hat Ceph Storage, 50 Physical Nodes up to 1 PB, Prem RH Sup 3Yr	B1M0

Red Hat Ansible

This section provides information on Red Hat Ansible management products.

- **Red Hat Ansible.** Red Hat Ansible Automation is automation software powered by Red Hat Ansible Engine—an execution engine with hundreds of modules that can automate all aspects of IT environments and processes—and Red Hat Ansible Tower—a management interface that can integrate with other services. The Ansible subscriptions sold by Lenovo are bundles of the Ansible Automation product and management tool called Ansible Tower in a single part number. Ansible is sold by number of nodes vs per socket or per core. Current offers include management for up to 100 nodes, and can be stacked to cover more nodes, hosts or instances.

The following table lists the feature codes to order a Red Hat Ansible subscription.

Table 10. Red Hat Ansible subscription feature codes

Description	Feature code
Red Hat Ansible Automation, Premium (100 Managed Nodes) RH Sup, 1-year	S1Z9
Red Hat Ansible Automation, Premium (100 Managed Nodes) RH Sup, 3-year	S1ZA
Red Hat Ansible Automation, Standard (100 Managed Nodes) RH Sup, 1-year	S1ZB
Red Hat Ansible Automation, Standard (100 Managed Nodes) RH Sup, 3-year	S1ZC

Part number reference

The following table is a reference of part numbers to enable easy mapping of a specific Red Hat SKU to the corresponding Lenovo SKU.

Table 11. Reference of Red Hat Part Numbers, SEO Codes and Feature Codes

Red Hat part number	Lenovo feature code	US/CA/AP SEO	EMEA/LA SEO	PID / CTO
MCT2735	S066	01PG308	01PG308	5731RHL
MCT2735F3	S067	01PG309	01PG309	5731RHL
MCT2736	S068	01PG310	01PG310	5731RHL
MCT2736F3	S069	01PG311	01PG311	5731RHL
MCT2884	2114	00YH838	00YH870	5731RHL
MCT2884F3	2115	00YH839	00YH871	5731RHL
MCT2885	2116	00YH836	00YH868	5731RHL
MCT2885F3	2117	00YH837	00YH869	5731RHL
MCT2886F3	2119	00YH835	00YH867	5731RHL
MCT2887	2120	00YH832	00YH864	5731RHL
MCT3691	S1ZB	02YD061	02YD061	5731RHL
MCT3691F3	S1ZC	02YD062	02YD062	5731RHL
MCT3694	S1Z9	02YD059	02YD059	5731RHL
MCT3694F3	S1ZA	02YD060	02YD060	5731RHL
MW00329	S06A	01PG312	01PG312	5731RHL
MW00329F3	S06B	01PG313	01PG313	5731RHL
MW00330	S06C	01PG314	01PG314	5731RHL
MW00330F3	S06D	01PG315	01PG315	5731RHL
RH00001	2042	00YH424	00YH621	5731RHL
RH00001F3	2043	00YH425	00YH622	5731RHL
RH00002	2044	00YH422	00YH619	5731RHL
RH00002F3	2045	00YH423	00YH620	5731RHL
RH00003	2019	00YH402	00YH599	5731RHL
RH00003F3	2020	00YH403	00YH600	5731RHL
RH00004	2021	00YH400	00YH597	5731RHL
RH00004F3	2022	00YH401	00YH598	5731RHL
RH00025	1936	00YH530	00YH727	5731RHL
RH00025F3	1937	00YH531	00YH728	5731RHL
RH00026	1958	00YH545	00YH742	5731RHL
RH00026F3	1959	00YH546	00YH743	5731RHL
RH00030	1871	00YH560	00YH757	5731RHL
RH00030F3	1872	00YH561	00YH758	5731RHL
RH00031	2003	00YH570	00YH767	5731RHL
RH00031F3	2004	00YH571	00YH768	5731RHL
RH00032	2008	00YH575	00YH772	5731RHL
RH00032F3	2009	00YH576	00YH773	5731RHL
RH00059	1941	00YH535	00YH732	5731RHL
RH00059F3	1942	00YH536	00YH733	5731RHL
RH00060	1963	00YH550	00YH747	5731RHL
RH00060F3	1964	00YH551	00YH748	5731RHL

Red Hat part number	Lenovo feature code	US/CA/AP SEO	EMEA/LA SEO	PID / CTO
RH00061	1863	00YH565	00YH762	5731RHL
RH00061F3	1864	00YH566	00YH763	5731RHL
RH00077	S0NS	7S0F000NWW	7S0F000NWW	7S0FCTO1WW
RH00077F3	S0NT	7S0F000PWW	7S0F000PWW	7S0FCTO1WW
RH00077F5	S0NU	7S0F000QWW	7S0F000QWW	7S0FCTO1WW
RH00078	S0NP	7S0F000KWW	7S0F000KWW	7S0FCTO1WW
RH00078F3	S0NQ	7S0F000LWW	7S0F000LWW	7S0FCTO1WW
RH00078F5	S0NR	7S0F000MWW	7S0F000MWW	7S0FCTO1WW
RH00079	S0N8	7S0F0004WW	7S0F0004WW	7S0FCTO1WW
RH00079F3	S0N9	7S0F0005WW	7S0F0005WW	7S0FCTO1WW
RH00079F5	S0NA	7S0F0006WW	7S0F0006WW	7S0FCTO1WW
RH00080	S0N5	7S0F0001WW	7S0F0001WW	7S0FCTO1WW
RH00080F3	S0N6	7S0F0002WW	7S0F0002WW	7S0FCTO1WW
RH00080F5	S0N7	7S0F0003WW	7S0F0003WW	7S0FCTO1WW
RH00097	S0P7	7S0F0013WW	7S0F0013WW	7S0FCTO1WW
RH00097F3	S0P8	7S0F0014WW	7S0F0014WW	7S0FCTO1WW
RH00097F5	S0P9	7S0F0015WW	7S0F0015WW	7S0FCTO1WW
RH00098	S0PG	7S0F001CWW	7S0F001CWW	7S0FCTO1WW
RH00098F3	S0PH	7S0F001DWW	7S0F001DWW	7S0FCTO1WW
RH00098F5	S0PJ	7S0F001EWW	7S0F001EWW	7S0FCTO1WW
RH00102	S0PR	7S0F001MWW	7S0F001MWW	7S0FCTO1WW
RH00102F3	S0PS	7S0F001NWW	7S0F001NWW	7S0FCTO1WW
RH00103	S0PX	7S0F001TWW	7S0F001TWW	7S0FCTO1WW
RH00103F3	S0PY	7S0F001UWW	7S0F001UWW	7S0FCTO1WW
RH00103F5	S0PZ	7S0F001VWW	7S0F001VWW	7S0FCTO1WW
RH00104	S0Q0	7S0F001WWW	7S0F001WWW	7S0FCTO1WW
RH00104F3	S0Q1	7S0F001XWW	7S0F001XWW	7S0FCTO1WW
RH00104F5	S0Q2	7S0F001YWW	7S0F001YWW	7S0FCTO1WW
RH00121	S0PA	7S0F0016WW	7S0F0016WW	7S0FCTO1WW
RH00121F3	S0PB	7S0F0017WW	7S0F0017WW	7S0FCTO1WW
RH00121F5	S0PC	7S0F0018WW	7S0F0018WW	7S0FCTO1WW
RH00122	S0PK	7S0F001FWW	7S0F001FWW	7S0FCTO1WW
RH00122F3	S0PL	7S0F001GWW	7S0F001GWW	7S0FCTO1WW
RH00122F5	S0PM	7S0F001HWW	7S0F001HWW	7S0FCTO1WW
RH00123	S0PU	7S0F001QWW	7S0F001QWW	7S0FCTO1WW
RH00123F3	S0PV	7S0F001RWW	7S0F001RWW	7S0FCTO1WW
RH00128	S0NE	7S0F000AWW	7S0F000AWW	7S0FCTO1WW
RH00128F3	S0NF	7S0F000BWW	7S0F000BWW	7S0FCTO1WW
RH00128F5	S0NG	7S0F000CWW	7S0F000CWW	7S0FCTO1WW
RH00129	S0NB	7S0F0007WW	7S0F0007WW	7S0FCTO1WW
RH00129F3	S0NC	7S0F0008WW	7S0F0008WW	7S0FCTO1WW

Red Hat part number	Lenovo feature code	US/CA/AP SEO	EMEA/LA SEO	PID / CTO
RH00129F5	S0ND	7S0F0009WW	7S0F0009WW	7S0FCTO1WW
RH00136	S0NL	7S0F000GWW	7S0F000GWW	7S0FCTO1WW
RH00136F3	S0NM	7S0F000HWW	7S0F000HWW	7S0FCTO1WW
RH00136F5	S0NN	7S0F000JWW	7S0F000JWW	7S0FCTO1WW
RH00137	S0NH	7S0F000DWW	7S0F000DWW	7S0FCTO1WW
RH00137F3	S0NJ	7S0F000EWW	7S0F000EWW	7S0FCTO1WW
RH00137F5	S0NK	7S0F000FWW	7S0F000FWW	7S0FCTO1WW
RH00148	1976	00YH514	00YH711	5731RHL
RH00148F3	1977	00YH515	00YH712	5731RHL
RH00149	1978	00YH512	00YH709	5731RHL
RH00149F3	1979	00YH513	00YH710	5731RHL
RH00150	1968	00YH506	00YH703	5731RHL
RH00150F3	1969	00YH507	00YH704	5731RHL
RH00151	1970	00YH504	00YH701	5731RHL
RH00151F3	1971	00YH505	00YH702	5731RHL
RH00152	1994	00YH518	00YH715	5731RHL
RH00152F3	1995	00YH519	00YH716	5731RHL
RH00153	1996	00YH516	00YH713	5731RHL
RH00153F3	1997	00YH517	00YH714	5731RHL
RH00154	1972	00YH510	00YH707	5731RHL
RH00154F3	1973	00YH511	00YH708	5731RHL
RH00155	1974	00YH508	00YH705	5731RHL
RH00155F3	1975	00YH509	00YH706	5731RHL
RH00270	M2S6V8	01GU768	01GU768	5731RHL
RH00271	M2S4V8	01GU769	01GU769	5731RHL
RH00272	S0Q3	7S0F001ZWW	7S0F001ZWW	7S0FCTO1WW
RH00273	S0Q4	7S0F0020WW	7S0F0020WW	7S0FCTO1WW
RH00394	x	01PG281	01PG281	5731RHL
RH00394F3	x	01PG282	01PG282	5731RHL
RH00557	B1XF	01PG273	01PG273	5731RHL
RH00557F3	B1XG	01PG274	01PG274	5731RHL
RH00558	B1XH	01PG275	01PG275	5731RHL
RH00558F3	B1XJ	01PG276	01PG276	5731RHL
RH00560	B1XK	01PG277	01PG277	5731RHL
RH00560F3	B1XL	01PG278	01PG278	5731RHL
RH00562	S0NY	7S0F000UWW	7S0F000UWW	7S0FCTO1WW
RH00562F3	S0NZ	7S0F000VWW	7S0F000VWW	7S0FCTO1WW
RH00562F5	S0P0	7S0F000WWW	7S0F000WWW	7S0FCTO1WW
RH00563	S0NV	7S0F000RWW	7S0F000RWW	7S0FCTO1WW
RH00563F3	S0NW	7S0F000SWW	7S0F000SWW	7S0FCTO1WW
RH00563F5	S0NX	7S0F000TWW	7S0F000TWW	7S0FCTO1WW

Red Hat part number	Lenovo feature code	US/CA/AP SEO	EMEA/LA SEO	PID / CTO
RH00564	B1X9	01PG267	01PG267	5731RHL
RH00564F3	B1XA	01PG268	01PG268	5731RHL
RH00564F5	B1XB	01PG269	01PG269	5731RHL
RH00565	B1XC	01PG270	01PG270	5731RHL
RH00565F3	B1XD	01PG271	01PG271	5731RHL
RH00565F5	B1XE	01PG272	01PG272	5731RHL
RH00583	B1XM	01PG279	01PG279	5731RHL
RH00583F3	B1XN	01PG280	01PG280	5731RHL
RH00763	B1LR	01CW992	01CW992	5731RHL
RH00763F3	B1LS	01CW993	01CW993	5731RHL
RH00764	B1LP	01CW990	01CW990	5731RHL
RH00764F3	B1LQ	01CW991	01CW991	5731RHL
RH00767	B1LV	01CW996	01CW996	5731RHL
RH00767F3	B1LW	01CW997	01CW997	5731RHL
RH00768	B1LT	01CW994	01CW994	5731RHL
RH00768F3	B1LU	01CW995	01CW995	5731RHL
RS00036	2102	00YH848	00YH880	5731RHL
RS00036F3	2103	00YH849	00YH881	5731RHL
RS00037	2104	00YH850	00YH882	5731RHL
RS00037F3	2105	00YH851	00YH883	5731RHL
RS00038	B1LZ	01KT977	01KT977	5731RHL
RS00038F3	B1M0	01KT978	01KT978	5731RHL
RV00085	S1ZD	02YD063	02YD063	5731RHL
RV00085F3	S1ZE	02YD064	02YD064	5731RHL
RV00086	S1ZF	02YD065	02YD065	5731RHL
RV00086F3	S1ZG	02YD066	02YD066	5731RHL
RV0213787	2053	00YH522	00YH719	5731RHL
RV0213787F3	2054	00YH523	00YH720	5731RHL
RV0216914	S0P1	7S0F000XWW	7S0F000XWW	7S0FCTO1WW
RV0216914F3	S0P2	7S0F000YWW	7S0F000YWW	7S0FCTO1WW
RV0216914F5	S0P3	7S0F000ZWW	7S0F000ZWW	7S0FCTO1WW
RV0236407	2055	00YH520	00YH717	5731RHL
RV0236407F3	2056	00YH521	00YH718	5731RHL
RV0243858	S0P4	7S0F0010WW	7S0F0010WW	7S0FCTO1WW
RV0243858F3	S0P5	7S0F0011WW	7S0F0011WW	7S0FCTO1WW
RV0243858F5	S0P6	7S0F0012WW	7S0F0012WW	7S0FCTO1WW
MCT2736	S4MF	02YF142	02YF142	5731RHL
MCT2736F3	S4MG	02YF143	02YF143	5731RHL
MCT2735	S4MD	02YF140	02YF140	5731RHL
MCT2735F3	S4ME	02YF141	02YF141	5731RHL
MW01501	S6EC	7S0F003PWW	7S0F003PWW	5731RHL

Red Hat part number	Lenovo feature code	US/CA/AP SEO	EMEA/LA SEO	PID / CTO
MW01501F3	S6EN	7S0F003ZWW	7S0F003ZWW	5731RHL
MW01502	S068	7S0F003QWW	7S0F003QWW	5731RHL
MW01502F3	S6EP	7S0F0040WW	7S0F0040WW	5731RHL
MW01509	S6EE	7S0F003RWW	7S0F003RWW	5731RHL
MW01509F3	S6EQ	7S0F0041WW	7S0F0041WW	5731RHL
MW01510	S6EF	7S0F003SWW	7S0F003SWW	5731RHL
MW01510F3	S6ER	7S0F0042WW	7S0F0042WW	5731RHL
MCT4023	S6EA	7S0F003MWW	7S0F003MWW	5731RHL
MCT4023F3	S6EL	7S0F003XWW	7S0F003XWW	5731RHL
MCT4024	S6EB	7S0F003NWW	7S0F003NWW	5731RHL
MCT4024F3	S6EM	7S0F003YWW	7S0F003YWW	5731RHL
RS00415	S6EG	7S0F003TWW	7S0F003TWW	5731RHL
RS00415F3	S6ES	7S0F0043WW	7S0F0043WW	5731RHL
RS00416	S6EH	7S0F003UWW	7S0F003UWW	5731RHL
RS00416F3	S6ET	7S0F0044WW	7S0F0044WW	5731RHL
RS00421	S6EJ	7S0F003VWW	7S0F003VWW	5731RHL
RS00421F3	S6EU	7S0F0045WW	7S0F0045WW	5731RHL
RS00422	S6EK	7S0F003WWW	7S0F003WWW	5731RHL
RS00422F3	S6EV	7S0F0046WW	7S0F0046WW	5731RHL

Subscription FAQ

Additional information about subscriptions.

1. Q: What types of Red Hat subscriptions does Lenovo offer?

A: Lenovo offers OEM subscriptions and Resell subscriptions for Red Hat Linux, Hypervisor, HPC, SAP, OpenShift, OpenStack, Ansible, Ceph, Gluster and Hyperconverged. “OEM” subscriptions come with industry leading 24x7 support from Lenovo offering a single point to call for any hardware or software issues. Please refer to the product list found in this document.

2. Q: How is Red Hat Enterprise Linux sold?

A: Red Hat subscriptions are sold in 1, 3 and 5-year options. These are not “licenses” but are subscriptions that provide access to all software downloads, patches, upgrades, etc. and the ability to contact Lenovo or Red Hat for support. Support will be either 10x5 or 24x7 terms. Subscriptions are delivered from Lenovo to the customer.

3. Q: How are the Red Hat subscriptions delivered?

A: Red Hat subscription keys are inventoried by Lenovo and delivered via the Lenovo Key Management System (LKMS). Customers are sent an Authorization Code used to register the purchase on the LKMS. The actual subscription keys are then emailed to the customer to register at the customer’s Red Hat Network user account.

4. Q: Can I reassign a Red Hat subscription in the case of new hardware or a disaster recovery scenario?

A: Yes, Red Hat subscriptions can be reassigned to a new server by changing the server on the customer’s Red Hat Network account.

Lenovo compatibility

The Lenovo Server Operating System Interoperability Guide (OSIG) is a comprehensive source of information about operating system compatibility with Lenovo servers. It includes servers in the ThinkSystem, ThinkAgile, System x, ThinkServer, NeXtScale, Flex System and BladeCenter product families and covers servers that are currently supported by Lenovo under warranty.

For more information, please visit the OSIG page: <http://lenovopress.com/osig>. Use the dropdown menus to filter and finetune your search. In each of the search results, the support statement column contains clickable links that opens a popup window with details about the support.

For Lenovo option compatibility, the Lenovo ServerProven program validates selected products for compatibility with all Lenovo ThinkSystem servers. Through the ServerProven Program, Lenovo works with industry leaders to test their equipment with Lenovo products.

For compatibility information, please visit: <http://static.lenovo.com/us/en/serverproven/index.shtml>. For more details, please click on the Lenovo product. For compatibility with OS, please click on the green + button to expand the section.

XClarity Integrator

Lenovo XClarity Integrator enables XClarity Administrator to integrate into your existing IT applications, providing the functionality you need to manage Lenovo infrastructure right in the console of the software tools that you already use. XClarity Administrator is a centralized resource management solution that reduces complexity, speeds response, and enhances the availability of Lenovo ThinkSystem infrastructure and ThinkAgile solutions.

For more information on XClarity Administrator, see the Lenovo Press product guide: <https://lenovopress.com/tips1200-lenovo-xclarity-administrator>

Support from Lenovo

Lenovo Support provides comprehensive, single-source support for a wide range of server operating systems including Red Hat Enterprise Linux. Lenovo provides 24x7x365 service for critical problems, and support during business hours for noncritical problems. If live phone help is unavailable during those service windows, responses are provided within 2 hours.

For more information on Red Hat Linux support, see the following Lenovo support page: <https://datacentersupport.lenovo.com/us/en/solutions/ht507838>

Engineered solutions and Reference architectures

Lenovo publishes several *engineered solutions* using Red Hat products. These are typically accompanied by detailed Reference Architectures posted on the Lenovo Press web site.

Through the Intel Select Solution program, Lenovo offers a growing portfolio of high availability Red Hat solutions featuring the robust ThinkSystem SR630 and SR650 servers. These offerings combine high-performance and cost-effective server platforms with Red Hat software. Some of the Reference Architectures are also Intel Select Solutions.

Recently published Reference Architectures include the following:

- **Red Hat Ceph Storage** - lenovopress.com/lp1147. This is a new reference architecture for Ceph storage, which gives customers access to unified, scalable storage with block, file, and object access.
- **Red Hat OpenShift Container Platform** - lenovopress.com/lp0968. This reference architecture was updated for both second-generation Intel Xeon Scalable processors and Intel Select programs. OpenShift provides container-based workloads on an OpenStack platform.
- **Lenovo Open Cloud** - lenovopress.com/lp1149. This is a new reference architecture which describes Lenovo's first infrastructure as code (IaC) solution which reduces cost, speeds deployment, and reduces risk by removing errors and security issues. It means that Lenovo Open Cloud can be used to plan infrastructure deployment using NetBox DCIM, automatically discover, configure and manage the HW using Lenovo XClarity and Confluent, deploy other infrastructure platforms such as an OpenStack, Ceph or OpenShift clusters, and manage the platform end-to-end using Red Hat Satellite, Ansible Tower and CloudForms reducing the usual effort of days to mere hours. It allows customers to modify deployed clusters by adding newly discovered servers and to, just as easily, tear down the cluster and redeploy it for another purpose. Lenovo Open Cloud can even deploy itself via a bootstrapping process.
- **OpenStack for Service Providers** - lenovopress.com/lp0913. This is an update to our "Telco" reference architecture for Red Hat OpenStack 13, the first vertical on top of Lenovo Open Cloud. The RA update includes performance measurements for our tuned NFVi stack on ThinkSystem servers.

Related product families

Product families related to this document are the following:

- [Red Hat Enterprise Linux](#)
- [Red Hat Alliance](#)

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