



SUSE® Support Subscriptions and How to Buy SLE HPC

Subscriptions are a way for you to take full advantage of the capabilities of SUSE® Linux and open source software. With SUSE, you get a knowledgeable experienced partner that will provide the expertise, assistance, fixes, and upgrades needed to deliver an enterprise-grade technology infrastructure.

SUSE Support Subscriptions at a Glance:

- + Lower prices
- + Lifecycle offering for HPC
- + Long-term service pack support for HPC
- + Packaged hub for HPC

SUSE Linux Enterprise for High Performance Computing (SLE HPC) is built on the same distribution as SUSE Linux Enterprise Server, but it is sold with different terms, conditions, and cost-effective prices that are tailored to the unique requirements of high performance computing (HPC) environments—particularly the extreme scale of many of those environments. The internal price lists for the SLE HPC product are available to SUSE direct Sales, SUSE IHV partners, and SUSE ISV partners.

Lower Prices

HPC clusters generally consist of two types of systems: Head Nodes and Compute Nodes. Head Nodes provide the management function for the cluster and typically run tasks such as workload schedulers, input/output management, hosting shared filesystems, login nodes, cluster authentication, etc. Compute Nodes, as the name implies, only provide the processing resources needed for the HPC workloads.

The key attribute of an HPC cluster is that all the systems are focused on performing compute or I/O intensive subtasks to solve a computation task that is larger than any single system can solve. The SUSE Terms

and Conditions define which workloads and configurations are considered “HPC”.

SUSE has a single price strategy for HPC that uses the same product for both HPC Head Nodes and HPC Compute Nodes. We believe that a simple pricing model that applies to all HPC cluster systems is easier for everyone.

HPC environments might have a thousand systems to provide the resources necessary for solving complex problems. But these clusters are more homogeneous than a random collection of a thousand systems because all of the compute nodes are running identical copies of the operating system and running subtasks of a larger workload. As a result, the support costs for HPC are lower than for general purpose systems.

SUSE charges less for subscriptions for HPC environments due to these lower support costs and because of the sheer number of systems involved. SUSE provides HPC specific products such as SUSE Linux Enterprise Server for HPC or SUSE Linux Enterprise Server for HPC with ESPOS to deliver SUSE Linux for HPC environments. Because SUSE Linux Enterprise Server for

HPC has unique prerequisites and restrictions, these products cannot be directly purchased by a customer; they must be purchased through a SUSE business partner or through a SUSE direct salesperson.

We also made significant price reductions as part of the overall changes to the SUSE HPC offering. We believe that these price reductions will encourage more organizations running HPC workloads to consider using SUSE Linux. The recent Meltdown and Spectre security issues have reinforced the need for customers to have a strong partner like SUSE that is able to respond to these kinds of problems quickly.

Life Cycle Offering for HPC— Extended Service Pack Overlap Support (ESPOS)

HPC environments often have thousands of systems to provide the compute resources necessary for solving complex problems. One of the most challenging aspects of using HPC is managing the software stack running on the cluster. After the software stack, including the underlying operating system, is installed on all the cluster nodes, administrators are reluctant to update or change that stack. The support life of the operating system is important, particularly for systems that are subject to security compliance requirements.

SUSE releases a new Service Pack for a given SUSE Linux release (such as SUSE Linux Enterprise Server 12) approximately every twelve months. Each Service Pack is supported for approximately 18 months. That eighteen months includes a six month overlap period between a Service Pack and the subsequent Service Pack. After that six months of overlap support, customers will not receive new fixes unless they upgrade to the later service pack or purchase Long Term Service Pack Support (LTSS).

SUSE now provides new subscriptions for HPC that include a longer support life for each SUSE Linux Service Pack. This additional support life is called Extended Service Pack Overlap Support (ESPOS). Customers who purchase the SUSE Linux Enterprise Server for HPC subscription with ESPOS get an additional year of

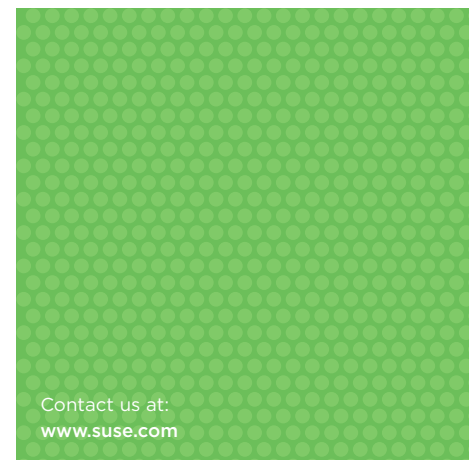
support, for a total of 18 months. This gives customers more time to upgrade and can allow a customer to skip an intervening Service Pack completely. SUSE Linux Enterprise Server 12 SP3 for HPC is the first Service Pack that can be supported for an additional 12 months via ESPOS, and this continues with SUSE Linux Enterprise High Performance Computing 15.

Long Term Service Pack Support for HPC (LTSS for HPC)

Long Term Service Pack Support (LTSS) for HPC provides customers with telephone support and fixes for critical system and security issues for up to three years beyond the end of the normal Service Pack overlap. LTSS for HPC can be purchased in one-year increments. The new LTSS for HPC can only be used to extend the life of a SUSE Linux Enterprise Server for HPC subscription and customers must maintain the underlying SUSE Linux Enterprise Server for HPC subscription in addition to the LTSS.

SUSE Linux Enterprise Server for HPC can be purchased for new clusters or when renewing existing clusters. Customers can convert to SUSE Linux Enterprise Server for HPC from a standard SUSE Linux Enterprise Server subscription at renewal. Customers must have the same subscription, such as SUSE Linux Enterprise Server for HPC with ESPOS, for all HPC nodes in a cluster. Customers cannot mix subscriptions with ESPOS with subscriptions that do not include ESPOS in a cluster. Similarly, customers must purchase LTSS for HPC for all nodes in the cluster.

For most HPC customers who need a longer support life, SUSE Linux Enterprise Server for HPC with ESPOS is the most cost-effective approach because it provides up to 30 months of support for a service pack. SUSE Linux Enterprise Server for HPC with ESPOS is less expensive than purchasing a standard 18-month subscription and adding one year of LTSS. Customers who need more than 30 months of support can always purchase the add-on LTSS support for the final two years after ESPOS support ends.



In summary, you can purchase these subscriptions for HPC Clusters:

Product	Pro	Con
SUSE Linux Enterprise Server for HPC 12 (standard or priority)	Lowest price	Standard 18-month support life
SUSE Linux Enterprise Server for HPC 12 (standard or priority)	30-month support life	Higher initial purchase price
Long Term Service Pack Support for HPC	Purchased only when needed. Up to 54 months support life	Highest total cost

Package Hub for HPC

Not all packages desired by HPC customers are suitable for inclusion in the HPC Module as a supported component of SUSE Linux for HPC. Examples are packages that are not broadly used or that are in an early development stage. SUSE provides easy access to those packages via Package Hub. We currently provide several packages of interest to the HPC community via Package Hub including singularity, robinhood, and clusterhell.

