

# SUSE Enterprise Storage Configurations

# SUSE Enterprise Storage Subscriptions

## Base Configuration - \$10000 (Priority Subscription)

SES and limited use of SLES to provide:

- **4 SES storage OSD nodes (1-2 sockets)**
- **6 SES infrastructure nodes**
  - SES monitor nodes (customer selects redundancy level)
  - SES management node
  - SES object gateway nodes
  - SES iSCSI gateway nodes
  - SES metadata server nodes

## Expansion Node - \$2300 (Priority Subscription)

SES and limited use of SLES to provide:

- **1 SES storage OSD node (1-2 sockets)**
- **1 SES infrastructure node**

# SUSE Enterprise Storage Minimum Configuration

## 4 SES OSD storage nodes

- 10 Gb Ethernet (2 networks bonded to multiple switches)
- 32 OSD's per storage cluster
- OSD journal can reside on OSD disk
- Dedicated OS disk per OSD storage node
- 1 GB RAM per TB raw OSD capacity for each OSD storage node
- 1.5 GHz per OSD for each OSD storage node
- **Monitor nodes, gateway nodes and metadata server node can reside on SES OSD storage nodes:**
  - 3 SES monitor nodes (requires SSD for dedicated OS drive)
  - iSCSI gateway, object gateway or metadata server nodes require redundant deployment
  - iSCSI gateway, object gateway or metadata server require incremental 4 GB RAM and 4 Cores

## Separate management node

- 4 GB RAM, 4 Core, 1 TB capacity

[https://www.suse.com/documentation/ses-3/book\\_storage\\_admin/data/cha\\_ceph\\_sysreq.html](https://www.suse.com/documentation/ses-3/book_storage_admin/data/cha_ceph_sysreq.html)

# Minimum Recommended Configuration (Production)

## 7 SES OSD storage nodes (no single node exceeds ~15%)

- 10 Gb Ethernet (4 physical networks bonded to multiple switches)
- 56+ OSDs per storage cluster
- RAID 1 OS disks for each OSD storage node
- SSDs for Journal
  - 6:1 ratio SSD journal to OSD
- 1.5 GB RAM per TB raw OSD capacity for each OSD storage node
- 2 GHz per OSD for each OSD storage node

## Dedicated physical nodes for infrastructure nodes:

- 3 SES Monitors; 4 GB RAM , 4 core processor, RAID 1 SSDs for disk
- 1 SES management node; 4GB RAM, 4 core processor, RAID 1 SSDs for disk
- Redundant physical deployment of gateway nodes or metadata server nodes:
  - SES object gateway nodes; 32 GB RAM, 8 core processor, RAID 1 SSDs for disk
  - SES iSCSI gateway nodes 16 GB RAM, 4 core processor, RAID 1 SSDs for disk
  - SES metadata server nodes (one active/one hot standby); 32 GB RAM, 8 core processor, RAID 1 SSDs for disk

[https://www.suse.com/documentation/ses-3/book\\_storage\\_admin/data/cha\\_ceph\\_sysreq.html](https://www.suse.com/documentation/ses-3/book_storage_admin/data/cha_ceph_sysreq.html)

# SUSE Enterprise Storage Configuration Requirements

## Nodes scoped as per SUSE configuration guidelines:

[https://www.suse.com/documentation/ses-3/book\\_storage\\_admin/data/cha\\_ceph\\_sysreq.html](https://www.suse.com/documentation/ses-3/book_storage_admin/data/cha_ceph_sysreq.html)

- Generate recommended configuration
- Deploy minimum configuration by exception

# Yes Certification Testing

SUSE will fully support SUSE Enterprise Storage on hardware systems that passed the YES certification testing for SUSE Linux Enterprise Server.

Systems that passed the YES certification testing can be found in our YES CERTIFIED bulletin search at:

**<https://www.suse.com/yessearch/Search.jsp>**

For SUSE Enterprise Storage running on hardware that has not been tested via the YES certification program, SUSE offers commercially reasonable best effort support.

For details on our YES certification program, please refer to:

**<https://www.suse.com/partners/ihv/>**



We adapt. You succeed.