

Instalación de SUSE Linux Enterprise Server manualmente con Agama

DESCRIPCIÓN

En este artículo se describe cómo instalar SUSE Linux Enterprise Server con Agama. La información presentada aquí se aplica a la instalación de los productos tanto en equipos físicos como en máquinas virtuales.

INTENCIÓN

Lea este artículo para comprender el proceso de instalación de SUSE Linux Enterprise Server mediante Agama.

ESFUERZO

Puede necesitar 15 minutos para leer este artículo.

OBJETIVO

Aprender a instalar SUSE Linux Enterprise Server manualmente con Agama.

REQUISITOS

- Un servidor físico o una máquina virtual. Para instalaciones de servidores sin entorno de escritorio, SUSE recomienda un mínimo de 1 CPU, 2 GB de memoria y 32 GB de almacenamiento (que

incluye almacenamiento para instantáneas Btrfs en la partición root, espacio de intercambio y almacenamiento para paquetes de software).

Un código de registro activo para el producto que desea instalar.

- Puede generar un código de registro para el producto y activar su suscripción para su organización en el Centro de servicios al cliente de SUSE.



Nota: registro opcional

Algunas imágenes firmadas con la clave del desarrollador pueden permitirle omitir el registro antes o durante la instalación. Además, ciertas imágenes pueden contener todos los paquetes instalables para su sistema operativo, y puede utilizarlas como repositorio de paquetes sin conexión. En esos casos, puede que no necesite un código de registro activo antes de la instalación. Sin embargo, si utiliza paquetes de software de los repositorios oficiales en línea, SUSE recomienda registrar el producto en el Centro de servicios al cliente de SUSE.

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1 Introducción a Agama

Esta sección proporciona una breve descripción general de Agama, el instalador por defecto de SUSE Linux Enterprise Server 16.0 y versiones posteriores.

1.1 ¿Qué es Agama?

Agama es un instalador de código abierto flexible y potente desarrollado por SUSE. Puede utilizarlo para realizar la instalación manual o automatizada de versiones compatibles de SUSE Linux Enterprise Server en distintas arquitecturas de equipos. El método de instalación basado en Agama proporciona una interfaz intuitiva para imágenes *listas para usar* para diferentes casos de uso y cargas de trabajo. En combinación con Cockpit y Ansible, sustituye a YaST en SUSE Linux Enterprise Server.

2 Instalación de SUSE Linux Enterprise Server con Agama

Esta sección describe cómo instalar SUSE Linux Enterprise Server utilizando el archivo de imagen ISO basado en Agama.

2.1 Introducción

En las secciones siguientes se describe el procedimiento de instalación manual basado en Agama para SUSE Linux Enterprise Server. La información se aplica a la instalación de los productos tanto en equipos físicos como en máquinas virtuales.

2.2 Requisitos

- Un archivo de imagen ISO basado en Agama para versiones compatibles de SUSE Linux Enterprise Server. Puede descargarlo del Centro de servicios al cliente de SUSE y verificar su suma de comprobación para garantizar su integridad.



Nota: imágenes disponibles para productos

La imagen de instalación basada en Agama está disponible para SUSE Linux Enterprise Server 16.0 y versiones posteriores.

2.3 Instalación manual de SUSE Linux Enterprise Server para s390x con Agama

Para instalar manualmente SUSE Linux Enterprise Server con Agama, siga estos pasos:

PROCEDIMIENTO 1: INSTALACIÓN MANUAL DE SUSE LINUX ENTERPRISE CON AGAMA

1. Descargue la imagen `SLES-Online-16.0-s390x-Beta2.install.iso` y móntela:

```
> sudo mount -o loop SLES-Online-16.0-s390x-Beta2.install.iso ./install/agama/
```

2. (Opcional) Para la instalación en un entorno aislado o sin registro, descargue la imagen `SLES-16.0-s390x-Beta2.install.iso` y móntela.

```
> sudo mount -o loop SLES-16.0-s390x-Beta2.install.iso ./install/agama-offline/
install/
```

3. Para iniciar la instalación, ejecute el siguiente archivo parmfile:

EJEMPLO 1: ARCHIVO PARMFILE DE EJEMPLO

```
root=live:ftp://192.168.3.105/install/LiveOS/squashfs.img ❶
ip=192.168.3.100 ❷::192.168.3.254:24 ❸:SLE16-Beta2:enc800:none
rd.zdev=qeth,0.0.0800:0.0.0801:0.0.0802,layer2=1,portno=0
cio_ignore=all,!condev,!0.0.0160 nameserver=192.168.1.116 ❹
live.password=linux ❺ rd.zdev=dasd,0.0.0160
```

Ajuste su archivo parmfile según le convenga.

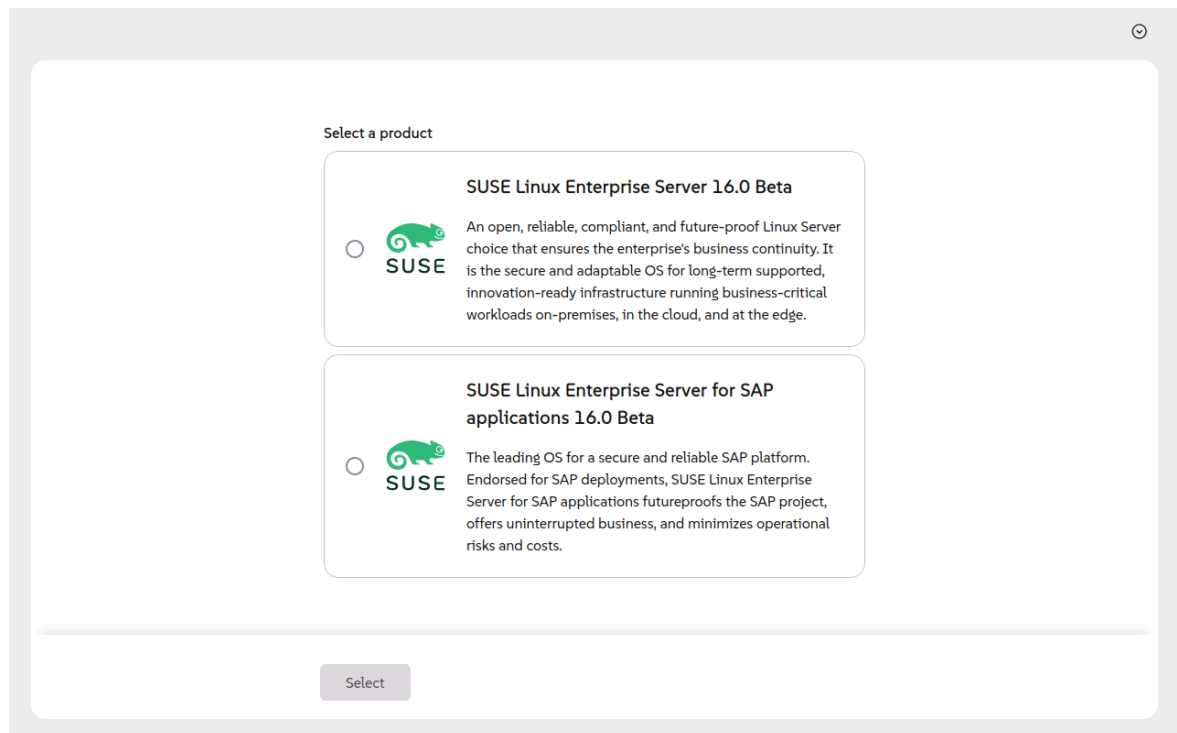
- ❶ URI de la imagen ISO del instalador montada en el *Paso 1*.
- ❷ Dirección IP del sistema que va a instalar. Si no define una dirección, se le asignará con DHCP y se mostrará en la consola después del arranque. Como la consola es difícil de leer en **x3270**, se recomienda configurar la red en el archivo parmfile.
- ❸ La dirección IP del gateway del sistema.
- ❹ La dirección IP del servidor DNS del sistema.

5. La contraseña del administrador root del sistema. Si no define una contraseña, se generará una aleatoria y se mostrará en la consola después del arranque. Como la consola es difícil de leer en x3270, se recomienda configurar una contraseña de root en el archivo parmfile.
4. (Opcional) Para la instalación en un entorno aislado o sin registro, añada el parámetro agama.install_url en el archivo parmfile para instalar desde la imagen SLES-16.0-S390X-Beta2.install.iso montada en *Paso 2*:

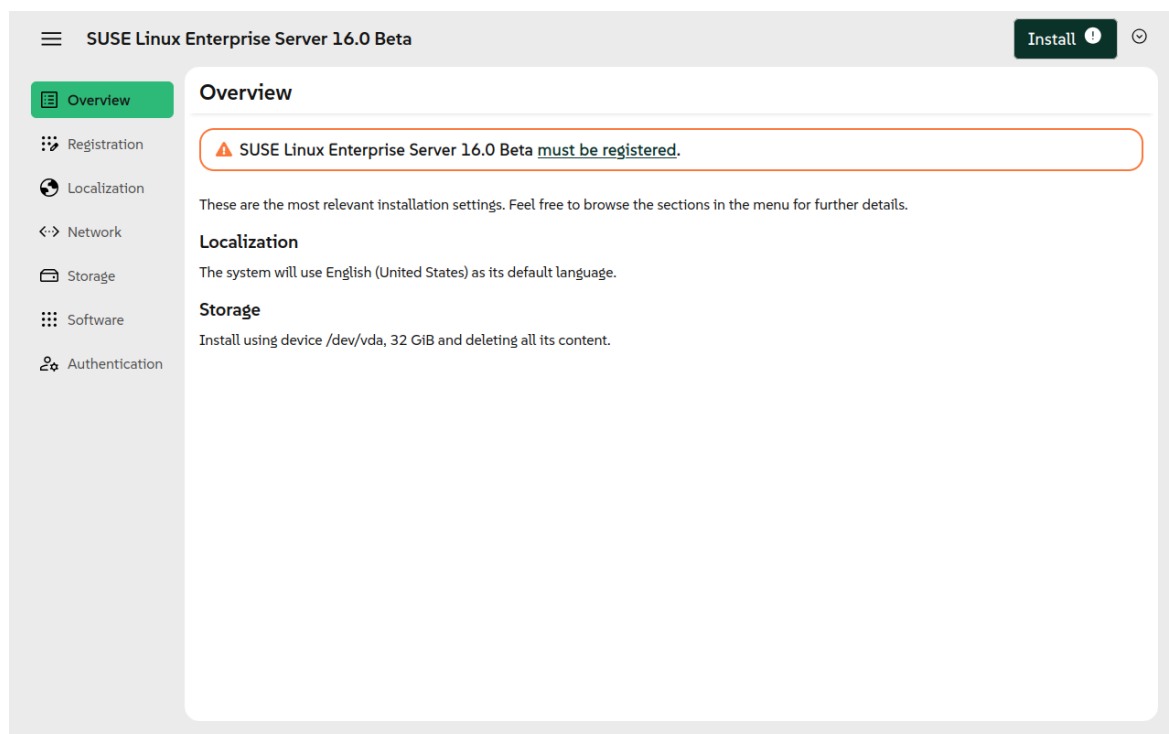
EJEMPLO 2: EJEMPLO DE ARCHIVO PARMFILE PARA LA INSTALACIÓN EN UN ENTORNO AISLADO

```
root=live:ftp://192.168.3.105/install/LiveOS/squashfs.img
agama.install_url=ftp://192.168.3.105/install/agama-offline/install
ip=192.168.3.100::192.168.3.254:24:SLE16-Beta2:enc800:none
rd.zdev=qeth,0.0.0800:0.0.0801:0.0.0802,layer2=1,portno=0
cio_ignore=all,!condev,!0.0.0160 nameserver=10.144.53.53
live.password=linux rd.zdev=dasd,0.0.0160
```

5. Abra un navegador Web que dirija a la dirección IP dada desde el archivo parmfile. Introduzca la contraseña de root y continúe con la instalación.
6. Seleccione SUSE Linux Enterprise Server 16.0 para la instalación y acepte la licencia para continuar.



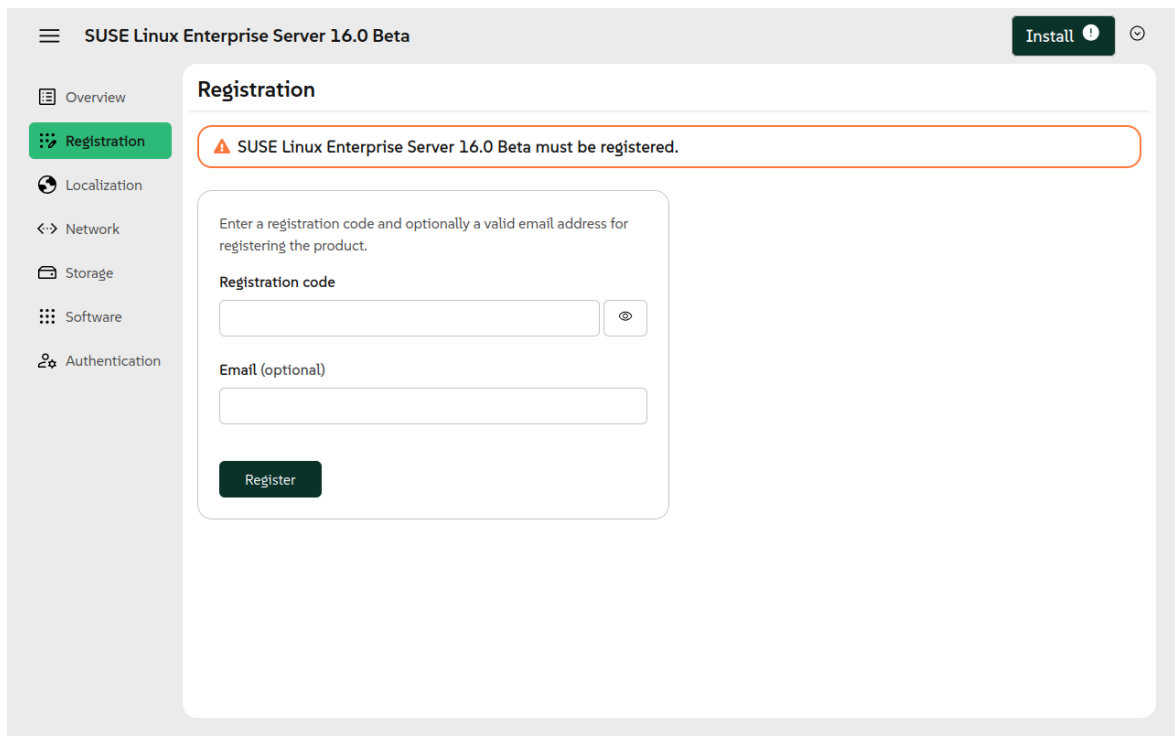
7. Se muestra una descripción general con los ajustes de instalación más relevantes. Ajuste la configuración seleccionando la categoría en el menú de la izquierda o, directamente, continúe con la instalación.



Sugerencia: idioma y teclado del instalador

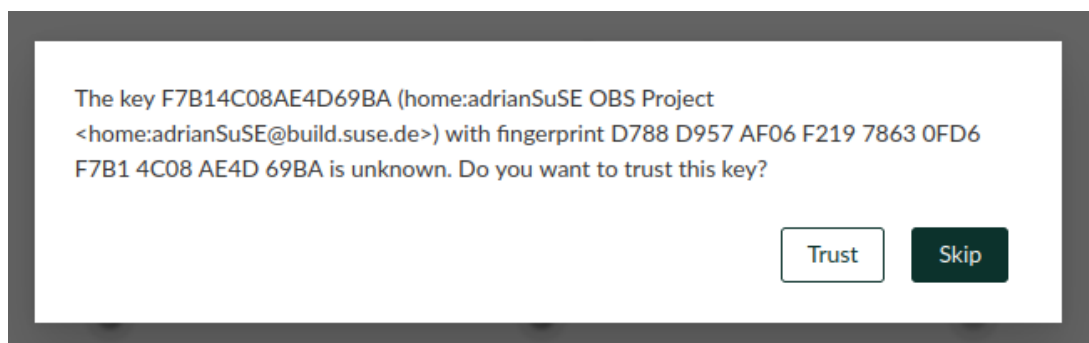
Haga clic en el menú de la flecha de la esquina superior derecha y seleccione *Opciones del instalador* para cambiar el idioma y el mapa de teclas utilizados por el instalador. El idioma solo se puede cambiar en instalaciones locales. Si usa un navegador Web para una instalación remota, configure el idioma preferido del contenido en la configuración del navegador y vuelva a cargar el instalador.

8. Registre su producto. Introduzca un código de registro y, opcionalmente, una dirección de correo electrónico válida.



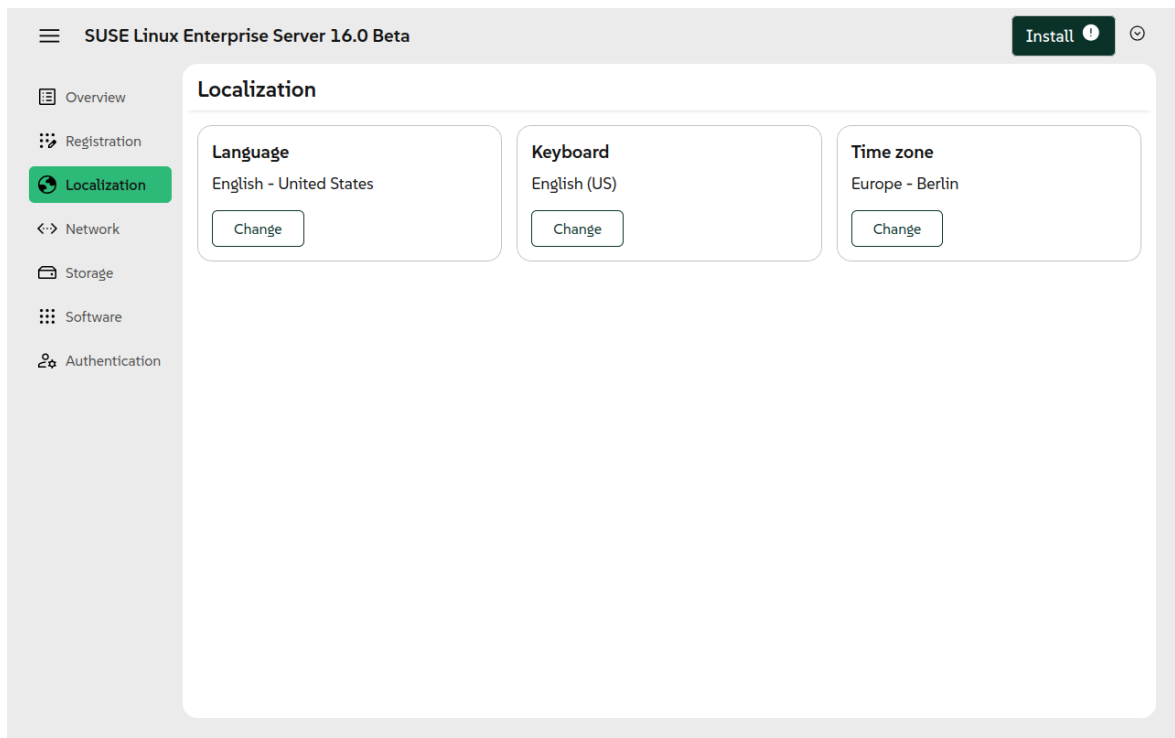
Nota: registro opcional para imágenes firmadas con la clave del desarrollador

Las imágenes firmadas con la clave del desarrollador pueden permitirle omitir el registro antes de la instalación. Si la imagen de su producto admite la instalación sin registro, es posible que vea una ventana emergente similar a la siguiente:

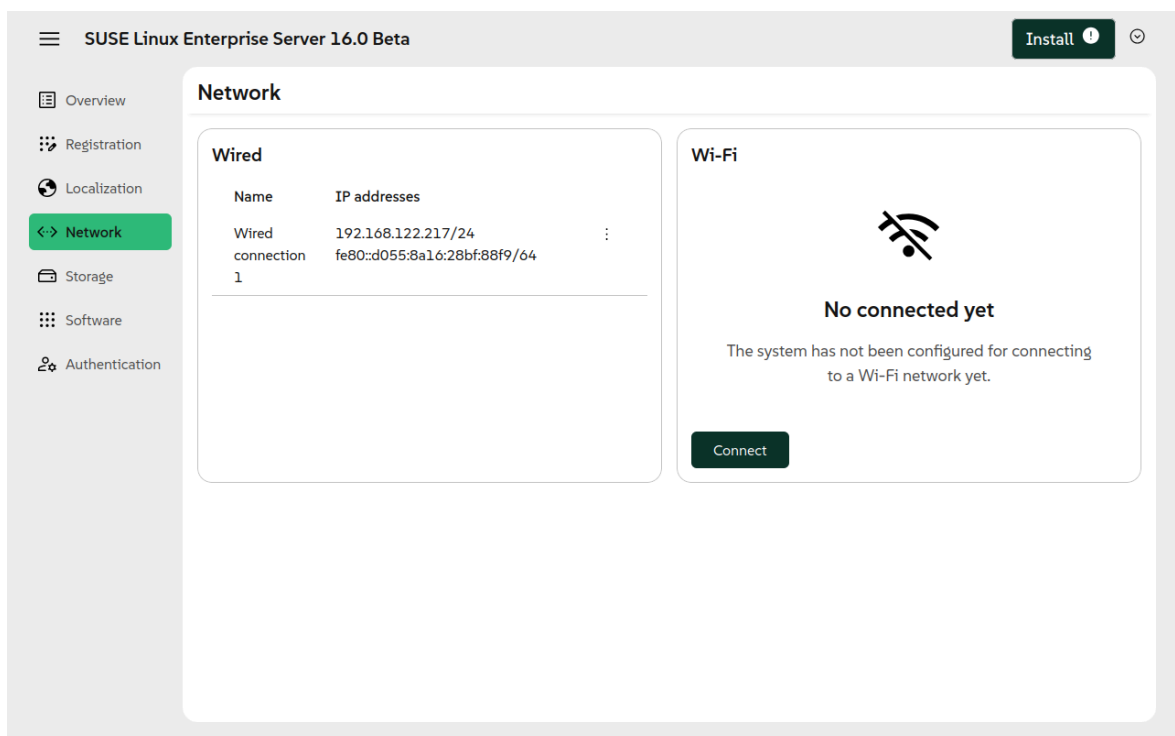


Para instalar sin registro, seleccione *Confiar* en la ventana emergente.

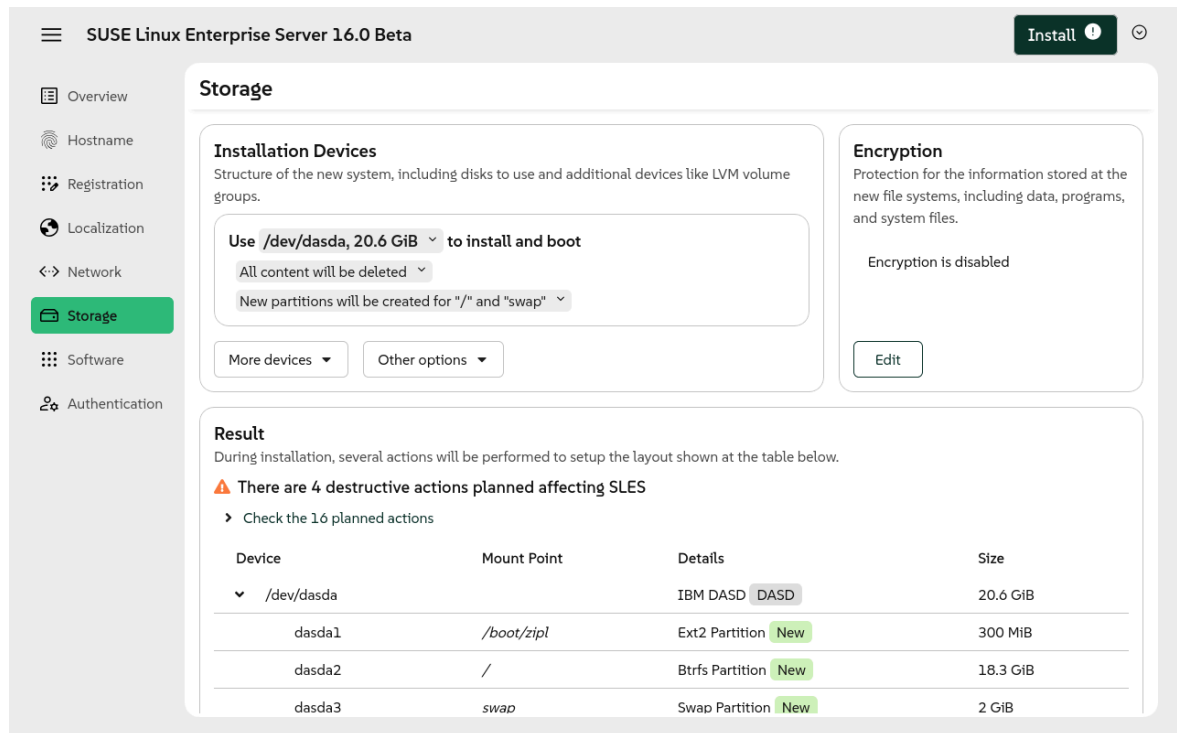
9. (Opcional) Ajuste la configuración de localización, como el idioma, el mapa de teclas y la zona horaria.



10. (Optional) Configure los ajustes de red. Para editar una conexión de red existente, haga clic en los tres puntos.



11. Seleccione un dispositivo de almacenamiento para la instalación.



Storage

Installation Devices
Structure of the new system, including disks to use and additional devices like LVM volume groups.

Use `/dev/dasda, 20.6 GiB` to install and boot

All content will be deleted

New partitions will be created for "/" and "swap"

More devices Other options

Encryption
Protection for the information stored at the new file systems, including data, programs, and system files.

Encryption is disabled

Edit

Result
During installation, several actions will be performed to setup the layout shown at the table below.

⚠ There are 4 destructive actions planned affecting SLES

Check the 16 planned actions

Device	Mount Point	Details	Size
▼ /dev/dasda		IBM DASD DASD	20.6 GiB
dasda1	/boot/zipl	Ext2 Partition New	300 MiB
dasda2	/	Btrfs Partition New	18.3 GiB
dasda3	swap	Swap Partition New	2 GiB

Actualmente, se admiten instalaciones en discos individuales o LVM. Para cambiar el disco o usar LVM, haga clic en el botón *Más dispositivos* del nombre del dispositivo en la sección *Dispositivos de instalación*.

Para usar dispositivos DASD, iSCSI o zFCP, primero debe configurarlos. Haga clic en *Otras opciones* y seleccione la tecnología deseada. Las opciones DASD y zFCP solo están disponibles si se conectan los dispositivos correspondientes.

Para activar un disco DASD, selecciónelo en la lista y haga clic en *Realizar una acción* > *Activar*. Una vez activado el disco, puede seleccionarlo para su instalación en la pantalla anterior.

Para activar un disco zFCP, selecciónelo en la lista y actívelo haciendo clic en el menú de tres puntos.

Para detectar un disco iSCSI, seleccione el iniciador iSCSI y haga clic en *Descubrir objetivos iSCSI*.

Por defecto, los sistemas de archivos se asignarán como nuevas particiones en el dispositivo seleccionado. Puede cambiar este comportamiento en la lista desplegable *Todo el contenido será borrado* en la sección *Dispositivos de instalación*. Están disponibles las siguientes directivas de espacio:

DIRECTIVAS DE ESPACIO

Eliminar el contenido actual

Todas las particiones se eliminarán y cualquier dato de los discos se perderá.

Reducir las particiones existentes

Los datos se conservan, pero las particiones actuales se reducirán según sea necesario.

Utilice el espacio disponible

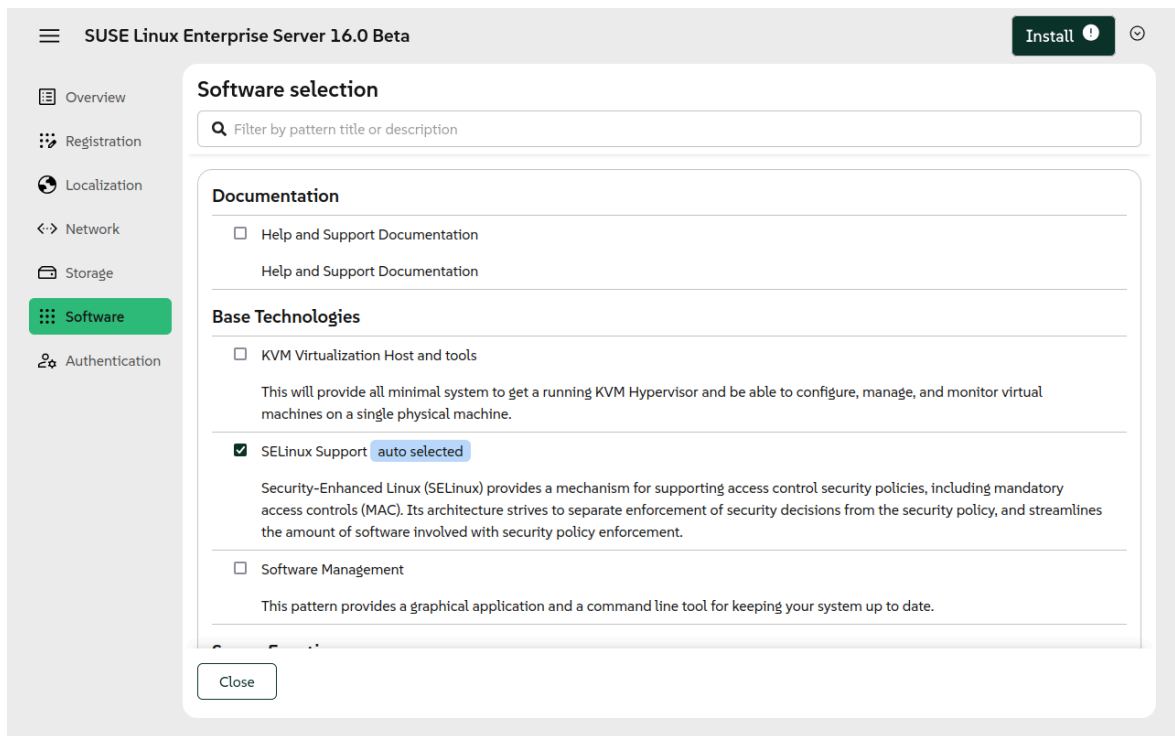
Los datos se conservan. Solo se usará el espacio no asignado a ninguna partición.

Personalizado

Seleccione qué hacer con cada partición.

Para editar particiones individuales, expanda la sección *Particiones y sistemas de archivos* haciendo clic en el signo >. Opcionalmente, puede configurar instantáneas Btrfs, opciones de arranque y habilitar el cifrado de disco completo (FDE).

12. *(Opcional)* Añada el software adicional que desee instalar, como el hipervisor KVM o el servicio de gestión del sistema Cockpit.

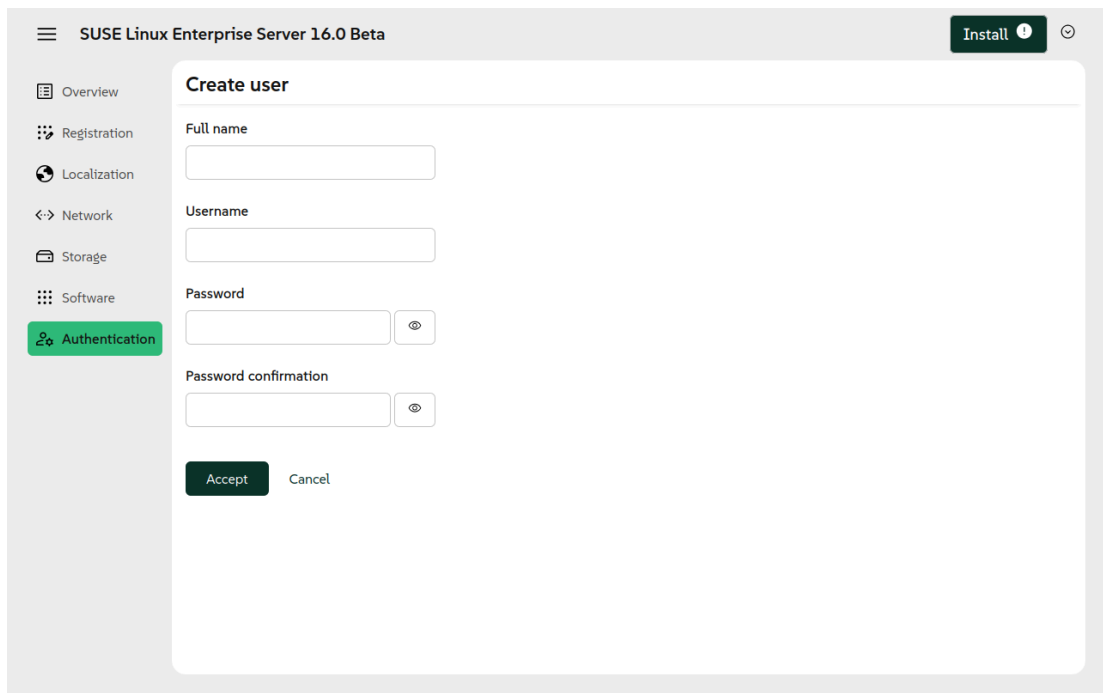


13. Configure los ajustes de autenticación.

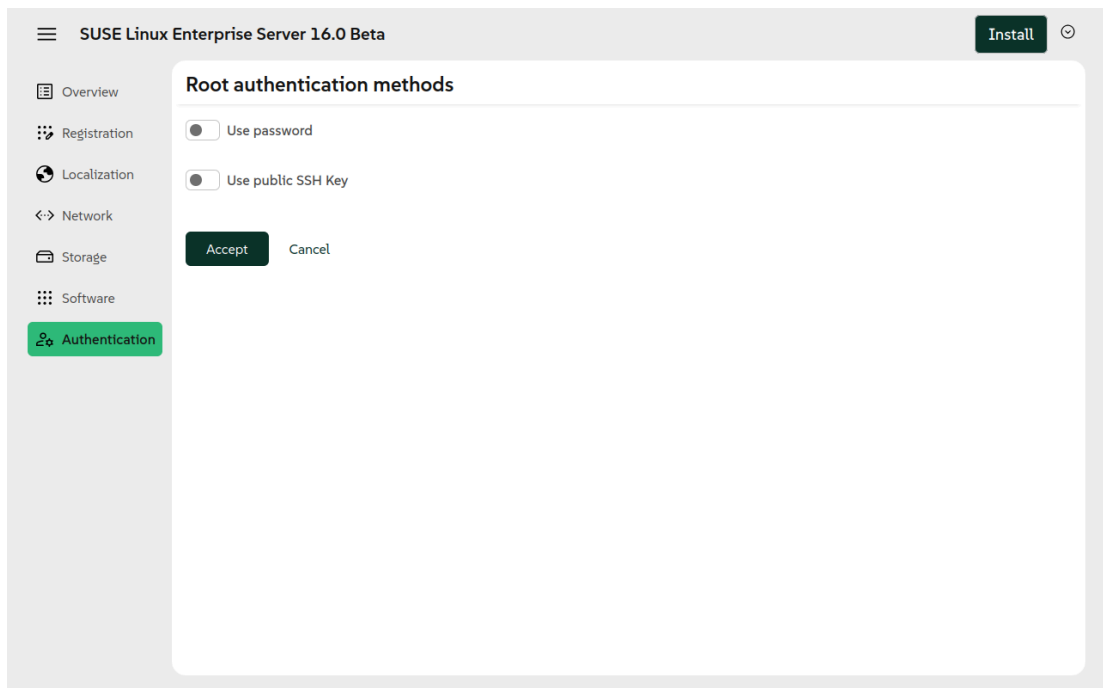
! Importante: sin acceso SSH del usuario root

El acceso SSH del usuario root está inhabilitado por defecto. Por lo tanto, se recomienda encarecidamente crear un usuario del sistema. Al primer usuario del sistema se le conceden privilegios de sudo automáticamente. También se puede utilizar para acceder a Cockpit.

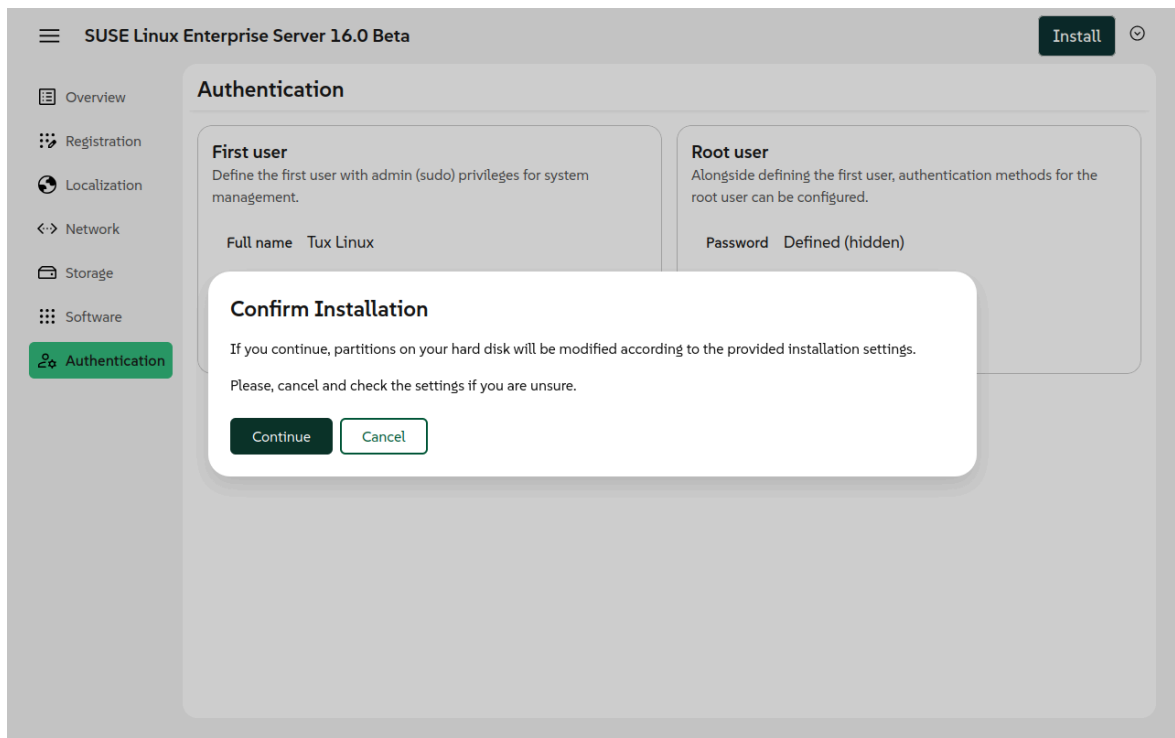
- a. Cree un usuario que no sea root. Haga clic en *Definir un usuario ahora* e introduzca detalles como el nombre de usuario y la contraseña.



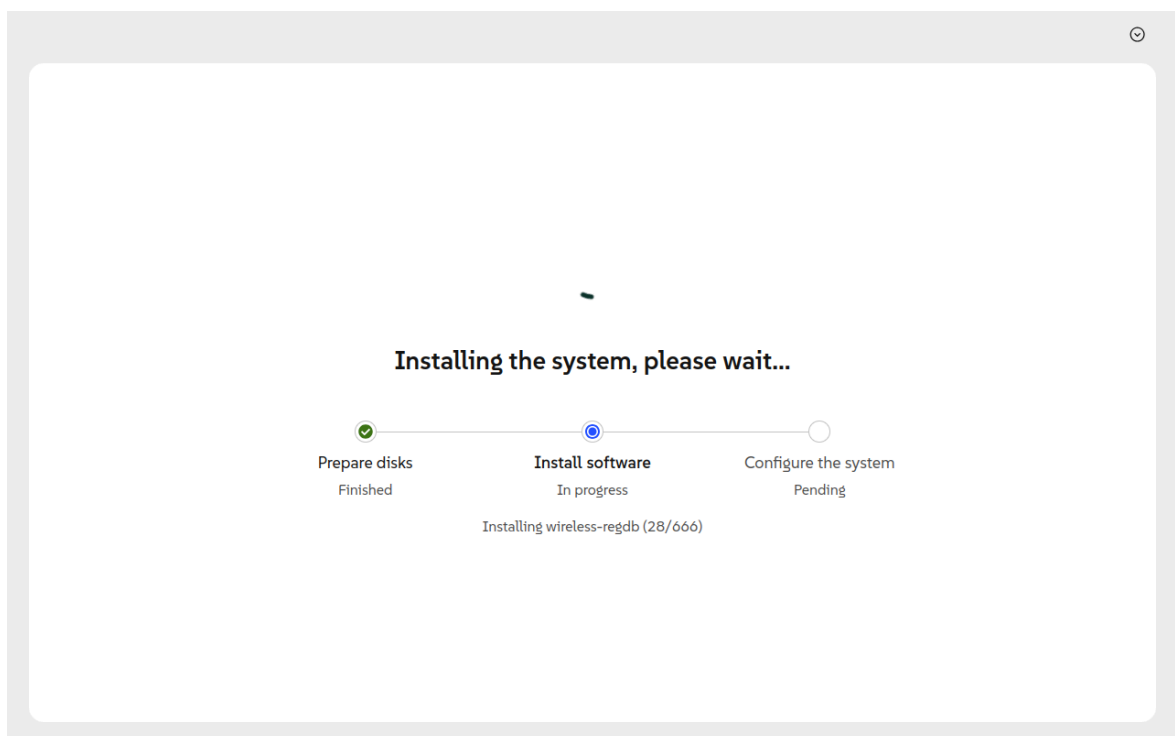
- b. Configure los métodos de autenticación para el root. Puede usar una contraseña segura, una clave pública SSH o ambas.



14. Haga clic en *Instalar* y confirme para iniciar la instalación.



15. Espere a que finalice la instalación del sistema. Se tardan unos 30 minutos en completar la instalación.

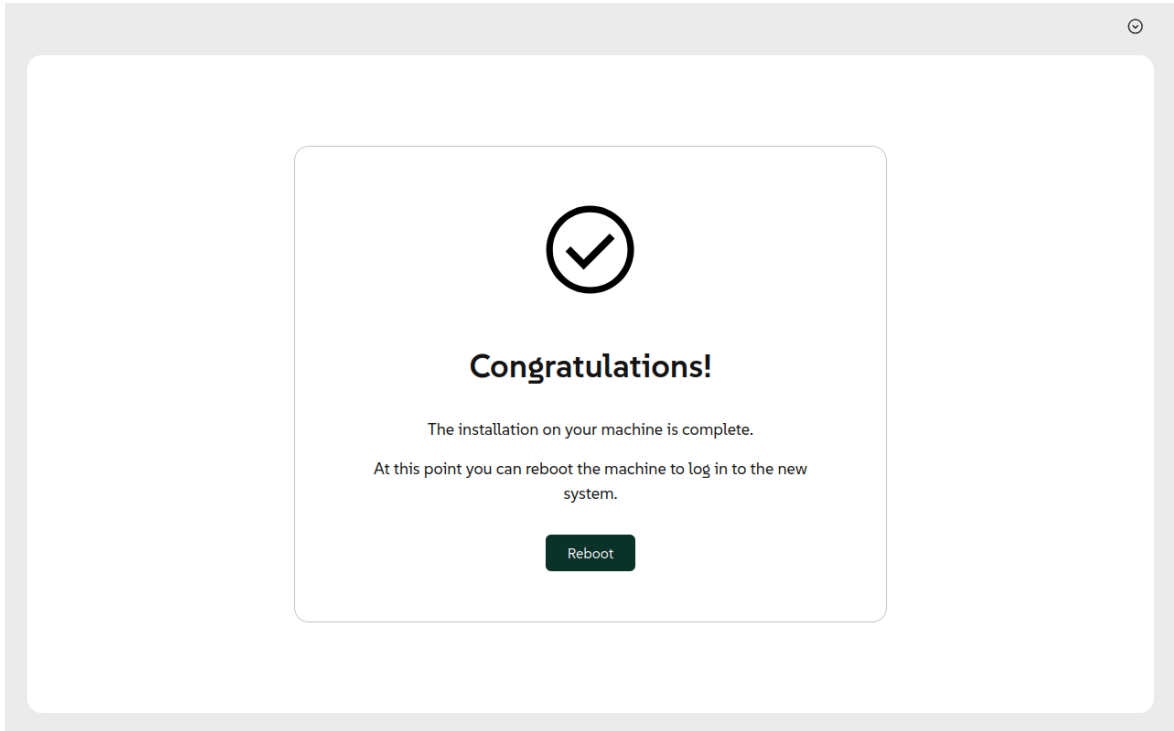




Sugerencia: registros de instalación

Puede usar el menú de la flecha de la esquina superior derecha de la ventana para ver los registros y los mensajes del sistema.

16. Cuando termine la instalación, seleccione *Reiniciar*.



2.4 Resumen

Después de comprobar que se ha realizado correctamente la configuración, el registro del producto, la instalación y el arranque, compruebe que puede iniciar sesión y utilizar el sistema.

PROCEDIMIENTO 2: VERIFICACIÓN DEL SISTEMA DESPUÉS DE LA INSTALACIÓN

1. Inicie sesión en el sistema como usuario root.

```
Welcome to SUSE Linux Enterprise Server 16.0 Alpha3 (x86_64) – Kernel 6.4.0–sifo.1.8–default (tty1).

SSH host key: SHA256:bUpdqEfAYuoIgbMY0s70qIdMEHHC/eKikm7cL3kwCMA (RSA)
SSH host key: SHA256:L5PQdXeaN9edpLw0z29LWxCNKe26EWWtNFopxMgn3U (ECDSA)
SSH host key: SHA256:CKA9BVCHu5 jkHECTUSyBGQRyDQQMReyIfUIOR/nDsXY (ED25519)
enp1s0: 192.168.122.40 fe80::a486:c31a:e64:6c0c

Hint: Num Lock on

localhost login: root
Password: _
```

2. Para verificar que su sistema funciona como se espera, ejecute algunos comandos básicos.

```
Welcome to SUSE Linux Enterprise Server 16.0 Alpha3 (x86_64) – Kernel 6.4.0–sifo.1.8–default (tty1).

SSH host key: SHA256:bUpdqEfAYuoIgbMY0s70qIdMEHHC/eKikm7cL3kwCMA (RSA)
SSH host key: SHA256:L5PQdXeaN9edpLw0z29LWxCNKe26EWWtNFopxMgn3U (ECDSA)
SSH host key: SHA256:CKA9BVCHu5 jkHECTUSyBGQRyDQQMReyIfUIOR/nDsXY (ED25519)
enp1s0: 192.168.122.40 fe80::a486:c31a:e64:6c0c

Hint: Num Lock on

localhost login: root
Password:
Have a lot of fun...
localhost:~ # whoami
root
localhost:~ # pwd
/root
localhost:~ #
```

3 Información adicional


Para obtener información sobre temas relacionados, consulte los siguientes recursos:

- Documentación del proyecto de código abierto Agama: <https://agama-project.github.io/docs>
- Documentación de IBM para distribuciones SUSE <https://www.ibm.com/docs/en/linux-on-systems?topic=distributions-suse-linux-enterprise-server>

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