

# 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 ppc64le mediante Agama

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

#### PROCEDIMIENTO 1: INSTALACIÓN MANUAL DE SUSE LINUX ENTERPRISE CON AGAMA

1. Copie la imagen ISO en el servidor VIOS:

```
> scpSLES-Online-16.0-ppc64le-Beta2.install.iso padmin@VIOS_SERVER
```

Sustituya `VIOS_SERVER` con el nombre de host o la dirección IP de su servidor VIOS.

2. Cree un dispositivo óptico virtual y cargue la imagen ISO en el dispositivo virtual del servidor VIOS:

```
(VIOS)$mkvopt -name sles16-offline -file SLES-Online-16.0-ppc64le-Beta2.install.iso  
-ro  
(VIOS)$loadopt -f -release -disk sles16-offline -vtd vcdXY
```

Sustituya `vcdXY` por su unidad de dispositivo virtual conectada a la partición lógica que desea arrancar.

3. Arranque el sistema desde el dispositivo virtual conectado. Seleccione *Select Boot Options* > *Select Install/Boot Device* > *CD/DVD* > *List All Devices* (Seleccionar opciones de arranque > Seleccionar dispositivo de instalación/arranque > CD/DVD > Mostrar todos los dispositivos) y seleccione el dispositivo óptico virtual que creó en el [Paso 2](#). A continuación, seleccione *Normal Boot Mode* (Modo de arranque normal) y confirme su selección.
4. Inicie sesión en la consola para obtener la contraseña de root y la dirección IP.
  - a. Seleccione `agama-installer` y pulse **Intro** para arrancar el sistema.

```
zumbi@shifu: ~  
GNU GRUB version 2.12  
+-----+  
| agama-installer  
| Check Installation Media -- agama-installer  
| local  
| Other options...  
+-----+  
  
Use the ^ and v keys to select which entry is highlighted.  
Press enter to boot the selected OS, 'e' to edit the commands  
before booting or 'c' for a command-line.  
The highlighted entry will be executed automatically in 55s.  
  
109 jostaberry-11 [PowerPC HMC]
```

b. Cuando finalice el arranque, se muestran la dirección IP y la contraseña de root.

```
zumbi@shifu: ~
[ OK ] Finished Permit User Sessions.
[ OK ] Started Agama Installer Service.
      Starting Agama's D-Bus bus monitor...
      Starting Agama Web Server...
[ OK ] Started Agama's D-Bus bus monitor.
      Starting Generate issue file for Agama SSL certificate...
[ OK ] Started Agama Web Server.
      Starting Agama automatic profile runner.
      Starting Postpone login prompt aft...L fingerprint issue is generated...
[ OK ] Finished Generate issue file for Agama SSL certificate.
[ OK ] Finished Postpone login prompt aft...SSL fingerprint issue is generated.
[ OK ] Started Getty on tty1.
[ OK ] Started Serial Getty on hvc0.
[ OK ] Reached target Login Prompts.
[ OK ] Reached target Multi-User System.
[ OK ] Reached target Graphical Interface.
      Starting X11 session...
      Starting Service enabling compressing RAM with zRam...
[ 39.519984][ T4578] zram: Added device: zram0
[ 39.523811][ T4571] zram0: detected capacity change from 0 to 133694080
[ OK ] Created slice User Slice of UID 0.
      Starting User Runtime Directory /run/user/0...
[ OK ] Finished User Runtime Directory /run/user/0.
      Starting User Manager for UID 0...
[ 39.609973][ T4588] Adding 66846976k swap on /dev/zram0. Priority:100 extents:1 across:66846976k SS
[ OK ] Finished Service enabling compressing RAM with zRam.
[ OK ] Started User Manager for UID 0.
[ OK ] Started Session 1 of User root.
[ OK ] Started X11 session.

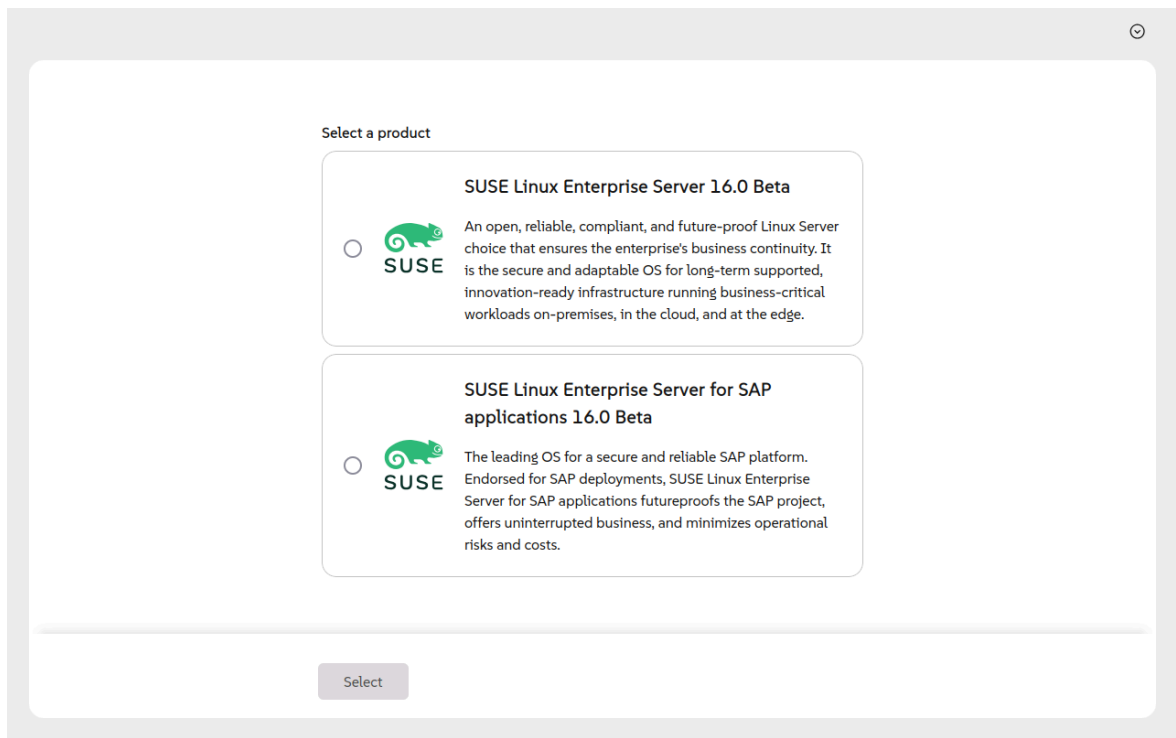
Welcome to Agama installer version 11+105! (hvc0)

SSH host key fingerprints:
  SHA256:nUjAtYbVkiw6E9yC+gRKNHA0bUnueLZJ8iI3Ghmy8k (ECDSA)
  SHA256:qGExR9jnnCMh7WM0EV8duJDu26HiDID2Mk/5b0cL4g (ED25519)
  SHA256:zoEcwrsfa5gxHWhiK0mlm664JTW3kMT0iWKZkrb0k (RSA)

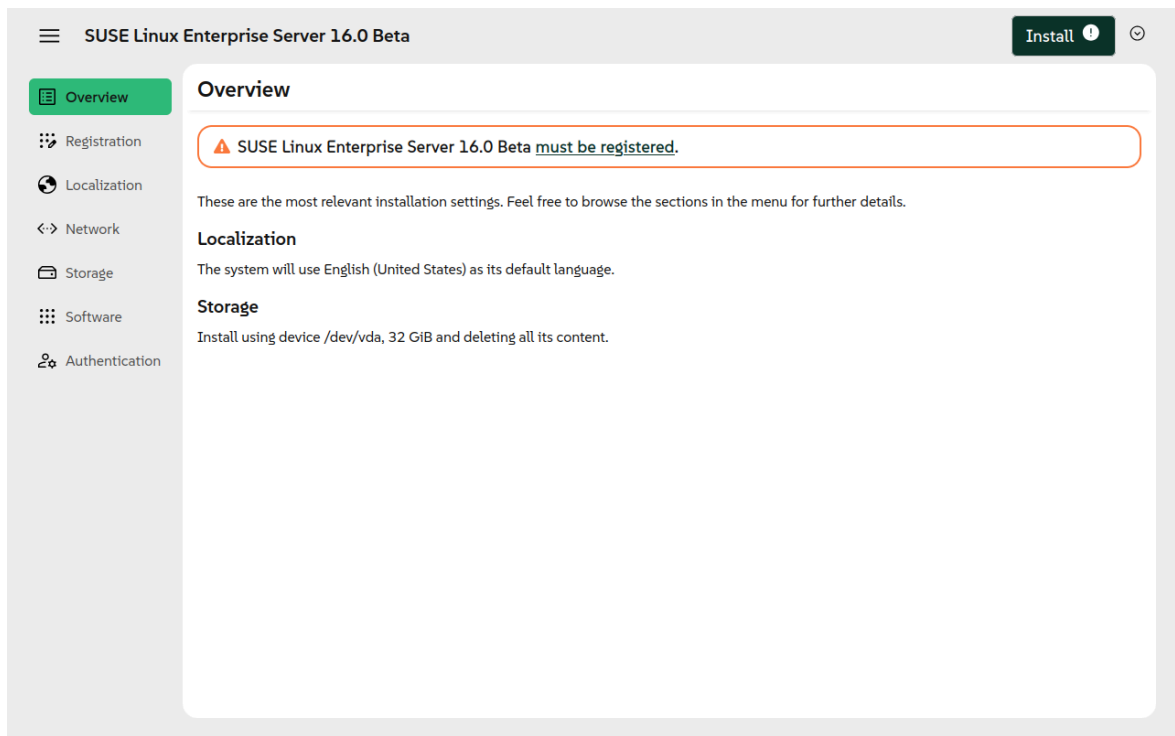
Connect to the Agama installer using these URLs:
  https://agama.local
  https://10.161.27.65
  https://192.168.0.42

Password for root user: eMyYKmhR
jostaberry-11 login:
109 jostaberry-11 [PowerPC HMC]
```

5. Abra un navegador Web que dirija a la URL indicada en la consola. 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.



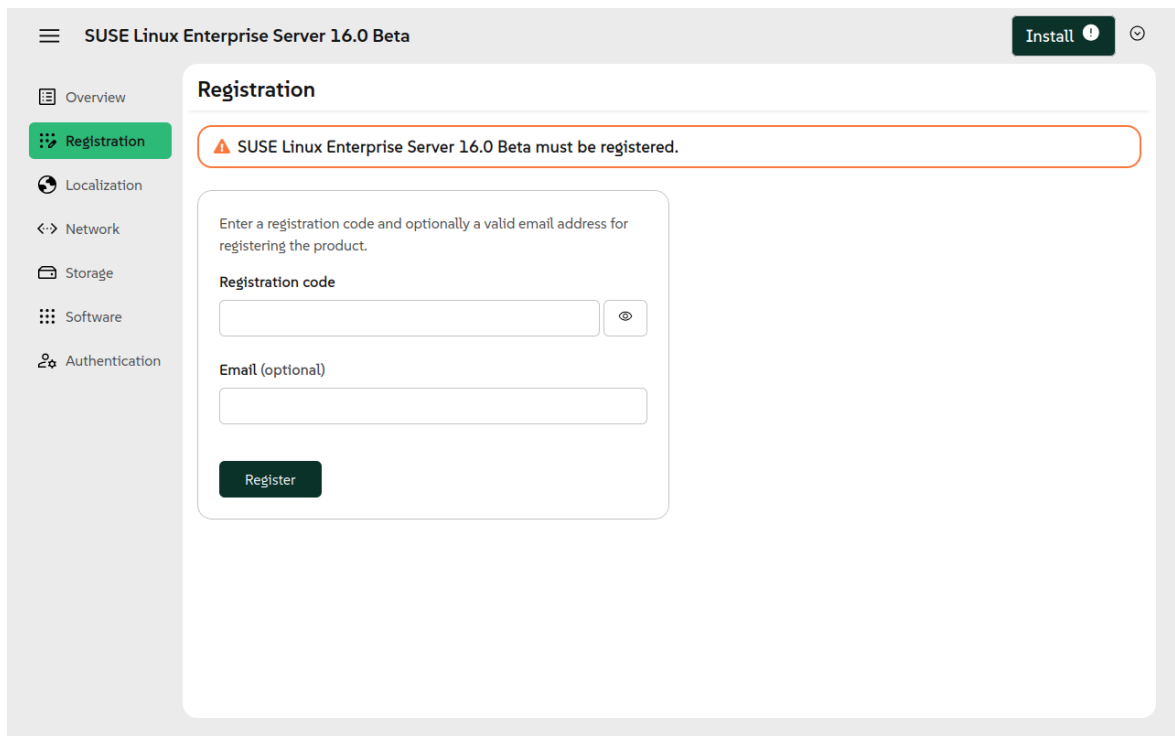
7. Se muestra una descripción general con los ajustes de instalación más relevantes. Ajuste la configuración seleccionando la categoría en el menú de la izquierda o, directamente, continúe con la instalación.



## Sugerencia: idioma y teclado del instalador

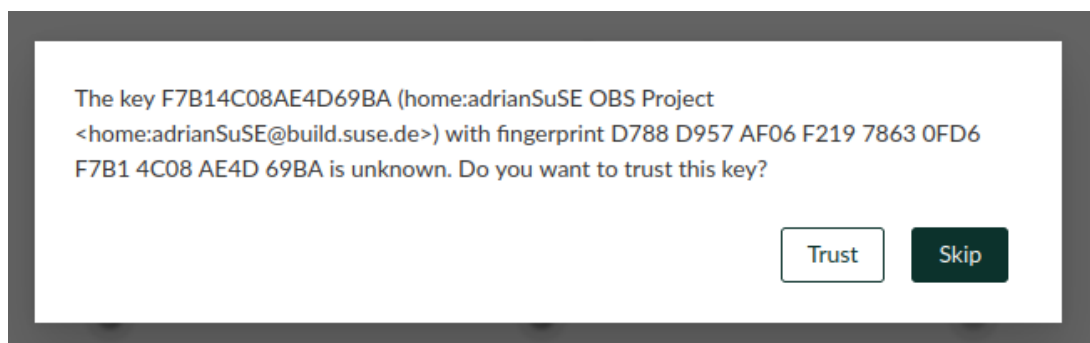
Haga clic en el menú de la flecha de la esquina superior derecha y seleccione *Opciones del instalador* para cambiar el idioma y el mapa de teclas utilizados por el instalador. El idioma solo se puede cambiar en instalaciones locales. Si usa un navegador Web para una instalación remota, configure el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



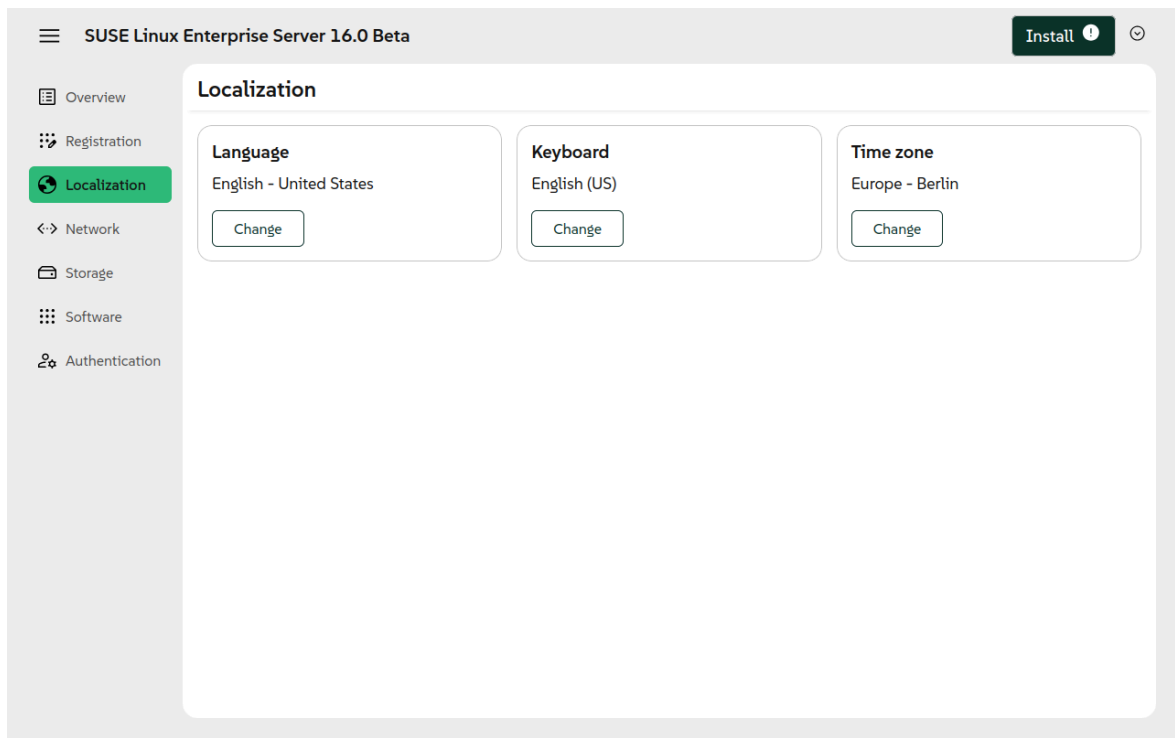
## Nota: registro opcional para imágenes firmadas con la clave del desarrollador

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:

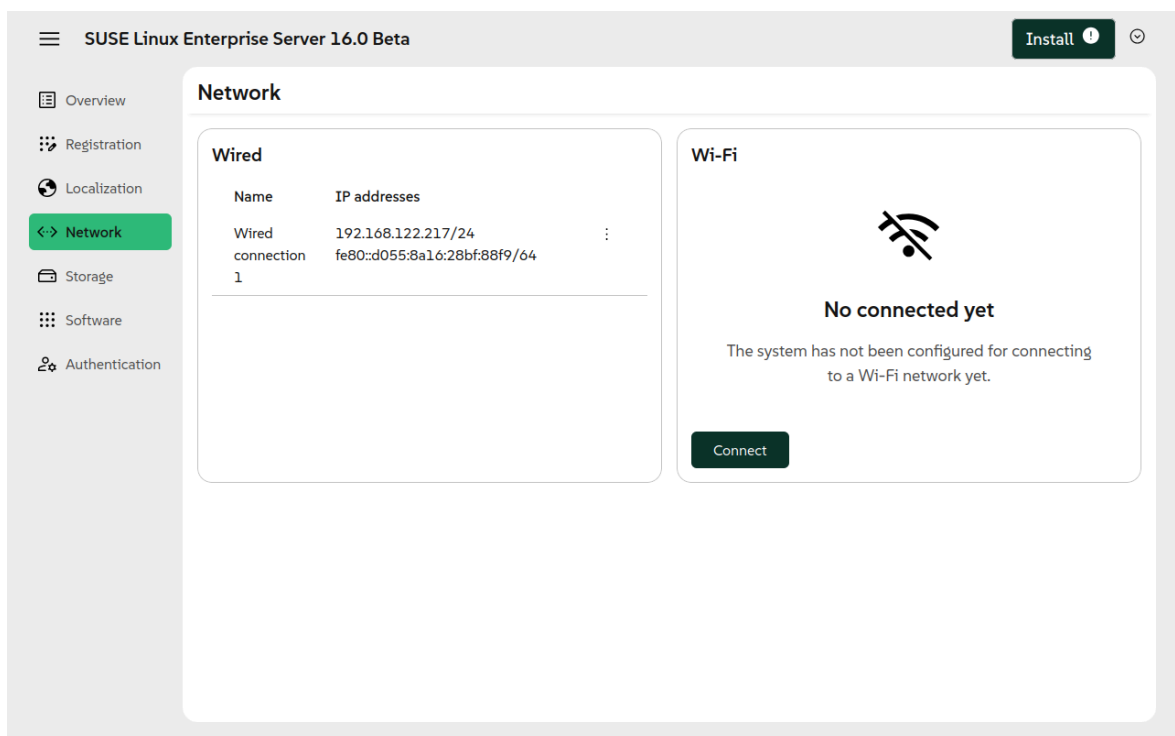


Para instalar sin registro, seleccione *Confiar* en la ventana emergente.

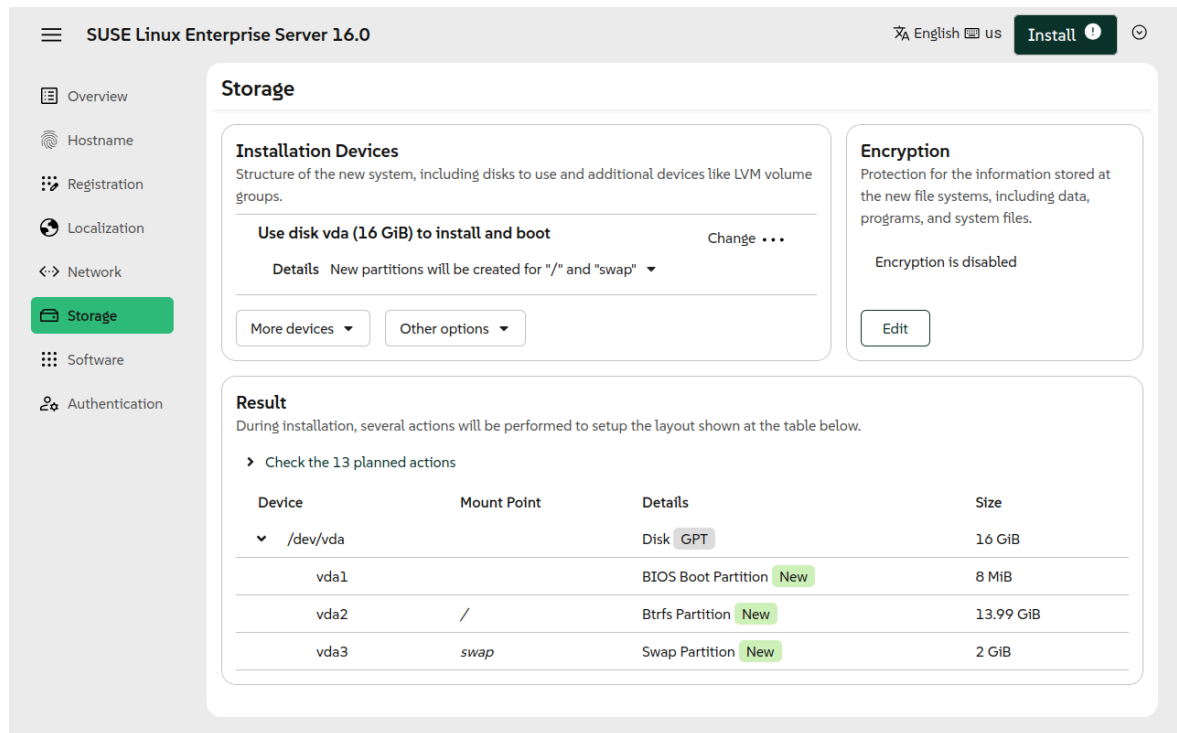
9. (Opcional) Ajuste la configuración de localización, como el idioma, el mapa de teclas y la zona horaria.



10. (Opcional) 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.



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

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

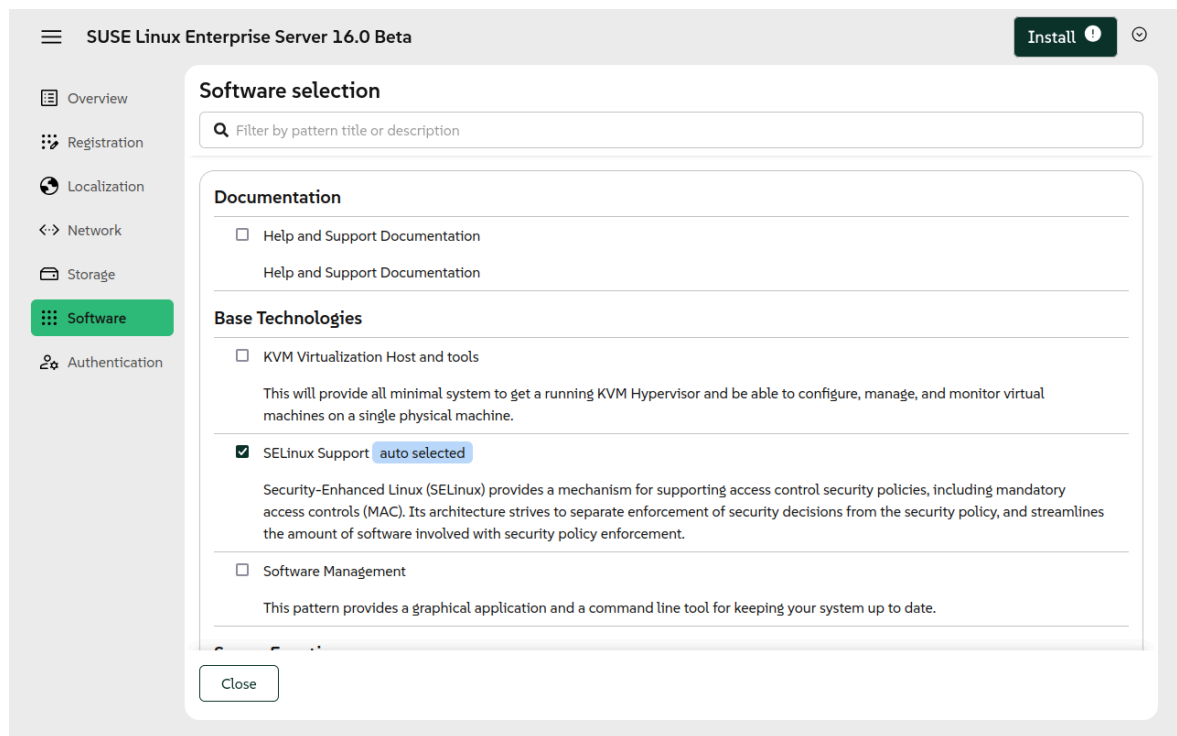
Los datos se conservan. Solo se usará el espacio no asignado a ninguna partición.

## 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.



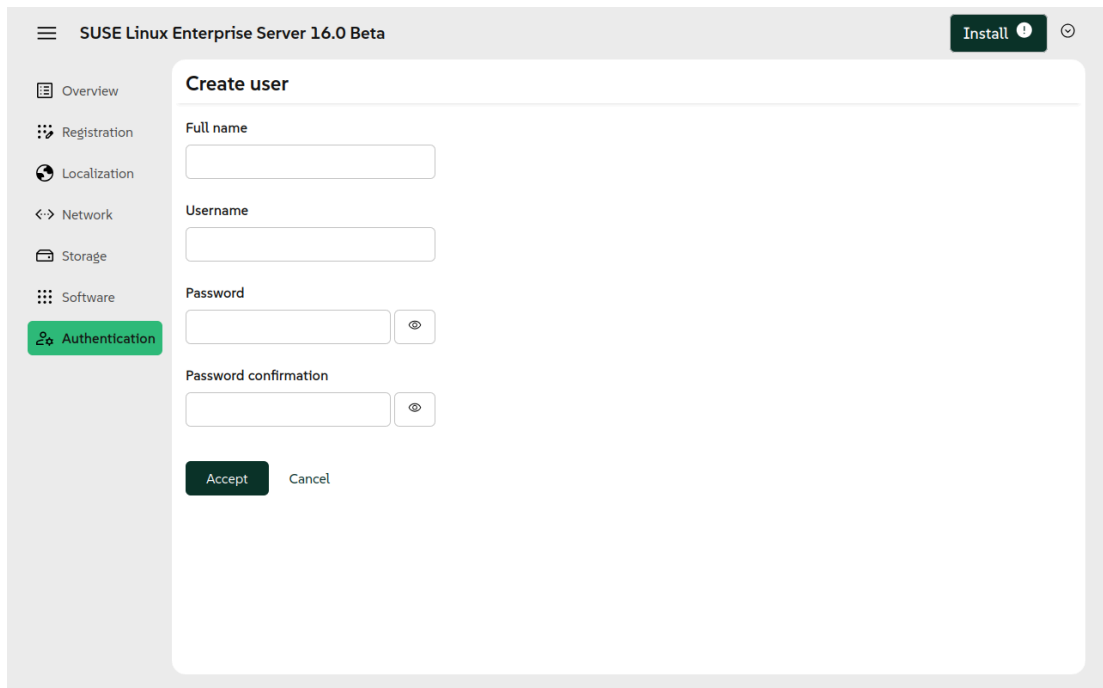
13. Configure los ajustes de autenticación.



### 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.

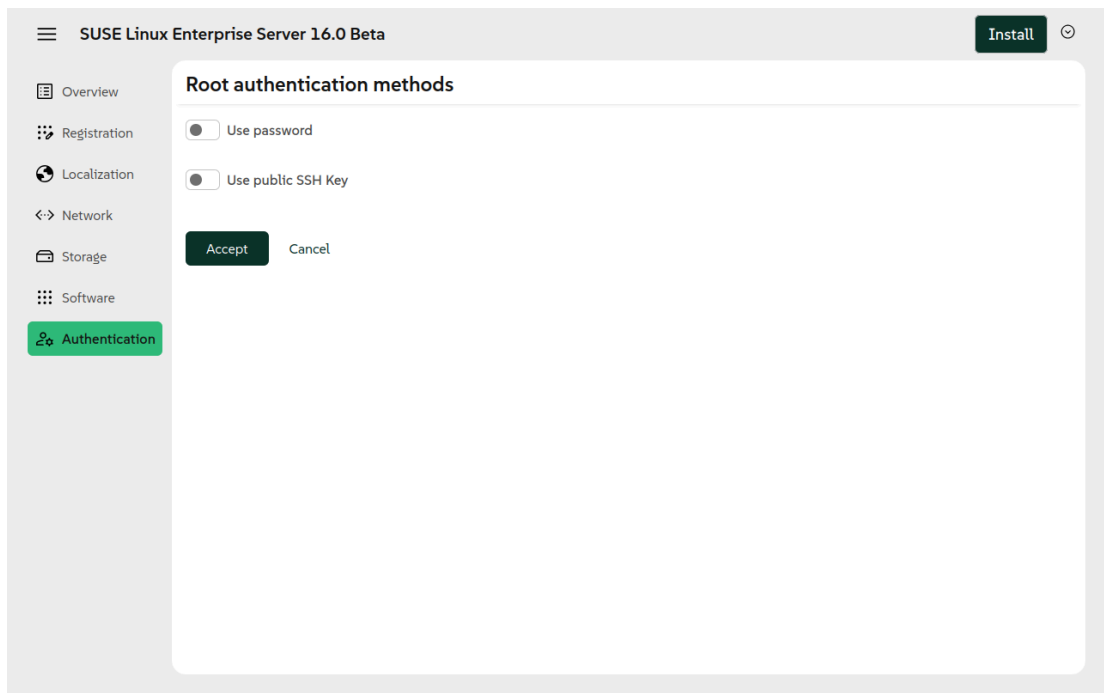


The screenshot shows the 'Create user' form in the SUSE Linux Enterprise Server 16.0 Beta web interface. The interface has a sidebar on the left with navigation options: Overview, Registration, Localization, Network, Storage, Software, and Authentication (highlighted in green). The main content area is titled 'Create user' and contains the following fields:

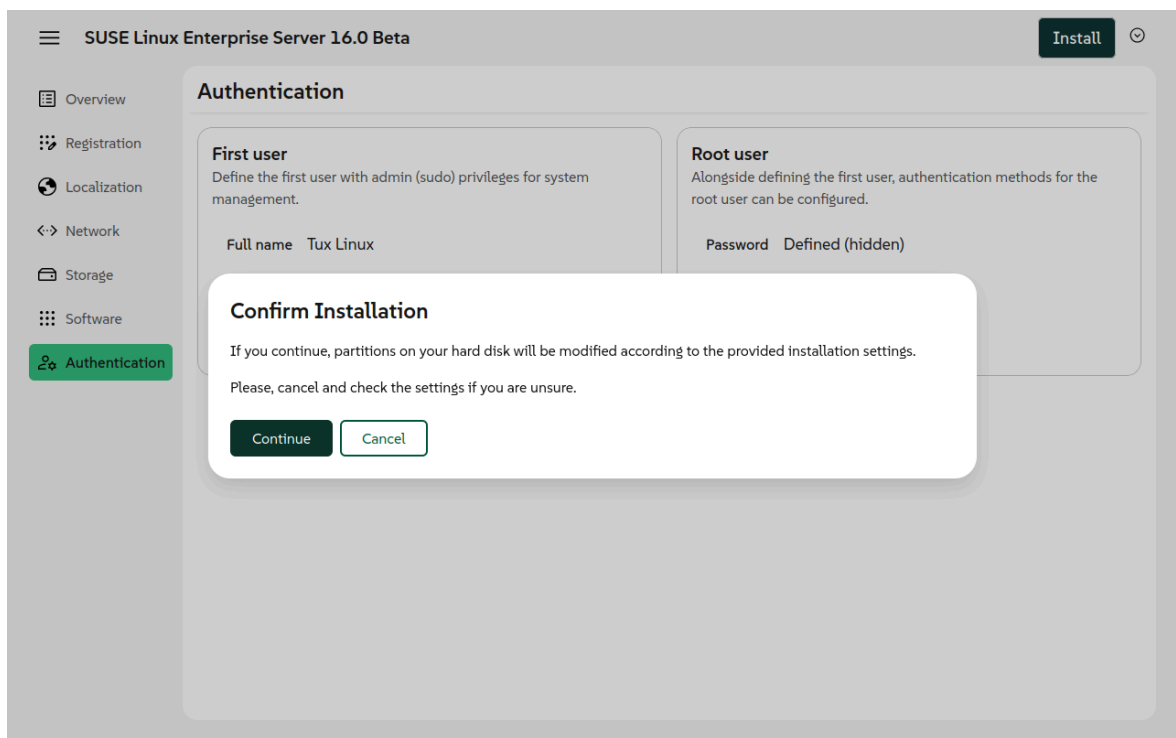
- Full name:
- Username:
- Password:  (with an eye icon to toggle visibility)
- Password confirmation:  (with an eye icon to toggle visibility)

At the bottom of the form, there are two buttons: 'Accept' and 'Cancel'.

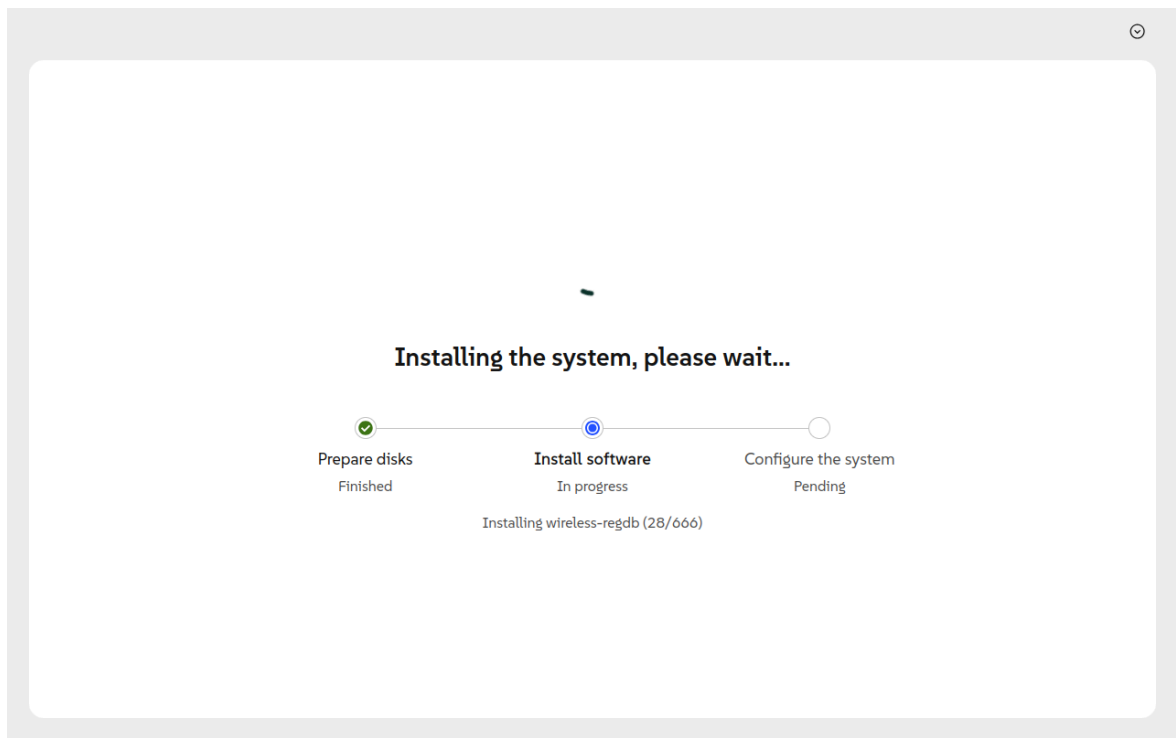
- b. Configure los métodos de autenticación para el root. Puede usar una contraseña segura, una clave pública SSH o ambas.



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



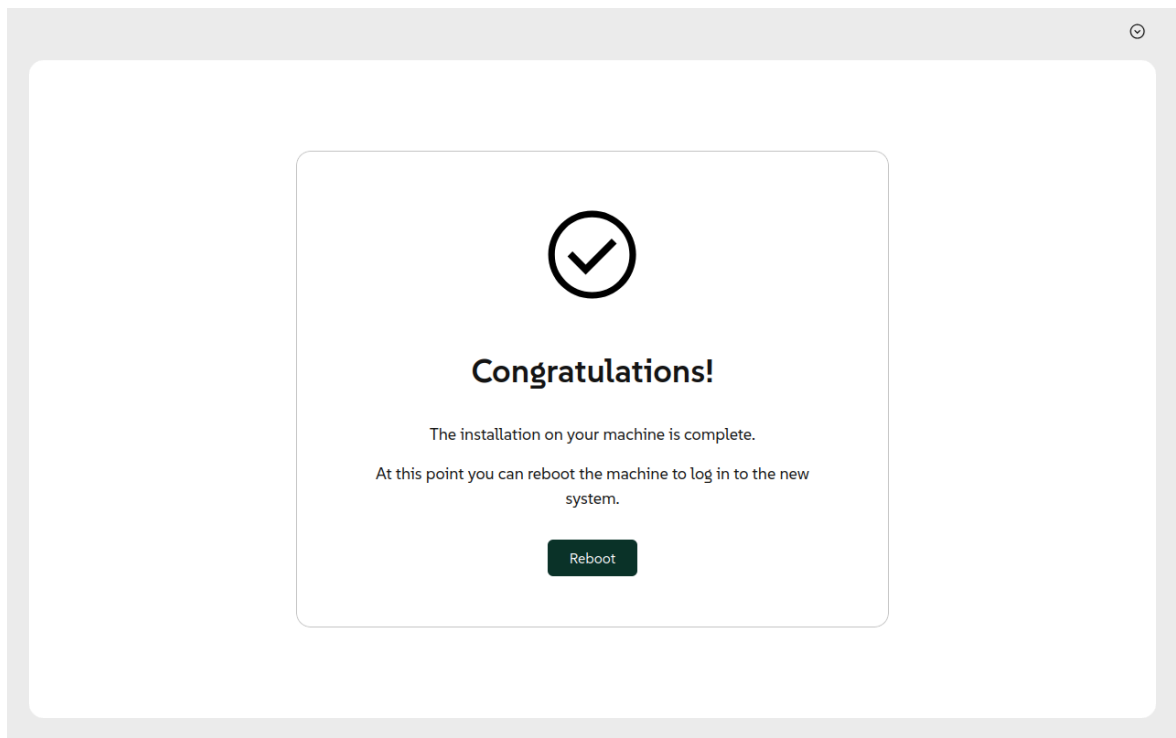
15. Espere a que finalice la instalación del sistema. Se tardan unos 30 minutos en completar la instalación.



### 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:bUpdqEfaYuo1gbMY0s70qIdMEHHC/eKikm7cL3kwCMA (RSA)
SSH host key: SHA256:L5PQdXeaN9edpLw0z29LWxCNKe26EWWWtNFopxMgn3U (ECDSA)
SSH host key: SHA256:CKA9BVCHu5jKhECTUSyBGQRyOQQMRyIfUIOR/nDsXY (ED25519)
emp1s0: 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:bUpdqEfaYuo1gbMY0s70qIdMEHHC/eXikm7cL3kwCMA (RSA)
SSH host key: SHA256:L5PQdXeaN9edpLw0z29LWxCNKe26EWWWtNFopxMgm3U (ECDSA)
SSH host key: SHA256:CKA9BUCHu5jKhECTUSyBGQRy0QQMReyIfUI0R/nDsXY (ED25519)
emp1s0: 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>
- Guías de inicio rápido de IBM para instalar Linux en POWER: <https://www.ibm.com/docs/en/linux-on-systems?topic=servers-quick-start-guides-installing-linux>
- Instrucciones de IBM para instalar Linux en una partición lógica PowerVM mediante un DVD virtual (vDVD): <https://www.ibm.com/docs/en/linux-on-systems?topic=aim-installing-linux-powervm-lpar-by-using-virtual-dvd-vdvd>

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