

# Installation manuelle de SUSE Linux Enterprise Server for SAP Applications à l'aide d'Agama

## CONTENU

Cet article décrit comment installer SUSE Linux Enterprise Server for SAP Applications à l'aide d'Agama. Les informations présentées ici s'appliquent à l'installation des produits sur du matériel sans système d'exploitation et des machines virtuelles.

## MOTIF

Lisez cet article pour comprendre le processus d'installation de SUSE Linux Enterprise Server for SAP Applications à l'aide d'Agama.

## EFFORT

Comptez 15 minutes pour lire cet article.

## OBJECTIF

Apprenez comment installer manuellement SUSE Linux Enterprise Server for SAP Applications à l'aide d'Agama

## CONDITIONS REQUISES

- Un serveur matériel sans système d'exploitation ou une machine virtuelle. Pour les installations de serveur sans environnement de bureau, SUSE recommande un minimum de 1 processeur, 2 Go de

mémoire et 32 Go d'espace de stockage (en ce compris l'espace de stockage pour les instantanés Btrfs dans la partition root, l'espace d'échange et l'espace de stockage pour les paquets logiciels).

- Code d'enregistrement actif pour le produit que vous souhaitez installer. Vous pouvez générer un code d'enregistrement pour le produit et activer son abonnement pour votre entreprise à partir de SUSE Customer Center.



### Remarque : enregistrement facultatif

Certaines images signées avec la clé du développeur peuvent vous permettre d'ignorer l'enregistrement avant ou pendant l'installation. En outre, certaines images peuvent contenir tous les paquets installables pour votre système d'exploitation que vous pouvez utiliser en tant que dépôt de paquets hors ligne. Dans ces cas, vous n'aurez pas nécessairement besoin d'un code d'enregistrement actif avant l'installation. Toutefois, si vous utilisez des paquets provenant des dépôts en ligne officiels, SUSE vous recommande d'enregistrer votre produit auprès de SUSE Customer Center.

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# 1 Présentation d'Agama

Cette section présente brièvement Agama, le programme d'installation par défaut pour SUSE Linux Enterprise Server for SAP Applications 16.0 et versions ultérieures.

## 1.1 Qu'est-ce qu'Agama ?

Agama est un programme d'installation Open Source flexible et puissant développé par SUSE. Vous pouvez l'utiliser pour effectuer une installation manuelle ou automatisée de SUSE Linux Enterprise Server for SAP Applications sur diverses architectures de machines. La méthode d'installation basée sur Agama fournit une interface intuitive pour des images *prêtes à l'emploi* pour différents cas d'utilisation et charges de travail. En combinaison avec Cockpit et Ansible, elle remplace YaST dans SUSE Linux Enterprise Server for SAP Applications.

# 2 Installation de SUSE Linux Enterprise Server for SAP Applications à l'aide d'Agama

Cette section décrit comment installer SUSE Linux Enterprise Server for SAP Applications à l'aide du fichier image ISO basé sur Agama.

## 2.1 Introduction

Les sections suivantes décrivent la procédure d'installation manuelle basée sur Agama pour SUSE Linux Enterprise Server for SAP Applications. Les informations s'appliquent à l'installation sur du matériel sans système d'exploitation et des machines virtuelles.

## 2.2 Configuration requise

- Un fichier image ISO basé sur Agama pour les versions prises en charge de SUSE Linux Enterprise Server for SAP Applications. Vous pouvez le télécharger à partir de SUSE Customer Center et vérifier sa somme de contrôle pour garantir son intégrité.



## Remarque : images disponibles pour les produits

L'image d'installation basée sur Agama est disponible pour SUSE Linux Enterprise Server for SAP Applications 16.0 et versions ultérieures.

### 2.3 Installation manuelle de SUSE Linux Enterprise Server for SAP Applications pour s390x à l'aide d'Agama

Pour installer manuellement SUSE Linux Enterprise Server for SAP Applications à l'aide d'Agama, procédez comme suit :

#### PROCÉDURE 1 : INSTALLATION MANUELLE DE SUSE LINUX ENTERPRISE À L'AIDE D'AGAMA

1. Téléchargez le fichier [SLES-Online-16.0-s390x-Beta2.install.iso](#) et montez-le :

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

2. (Facultatif) Pour une installation dans un environnement isolé physiquement ou sans enregistrement, téléchargez [SLES-16.0-s390x-Beta2.install.iso](#) et montez-le.

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

3. Utilisez le fichier parmfile suivant pour démarrer l'installation :

#### EXEMPLE 1 : EXEMPLE DE FICHER « PARMFILE »

```
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
```

Ajustez votre fichier parmfile en conséquence.

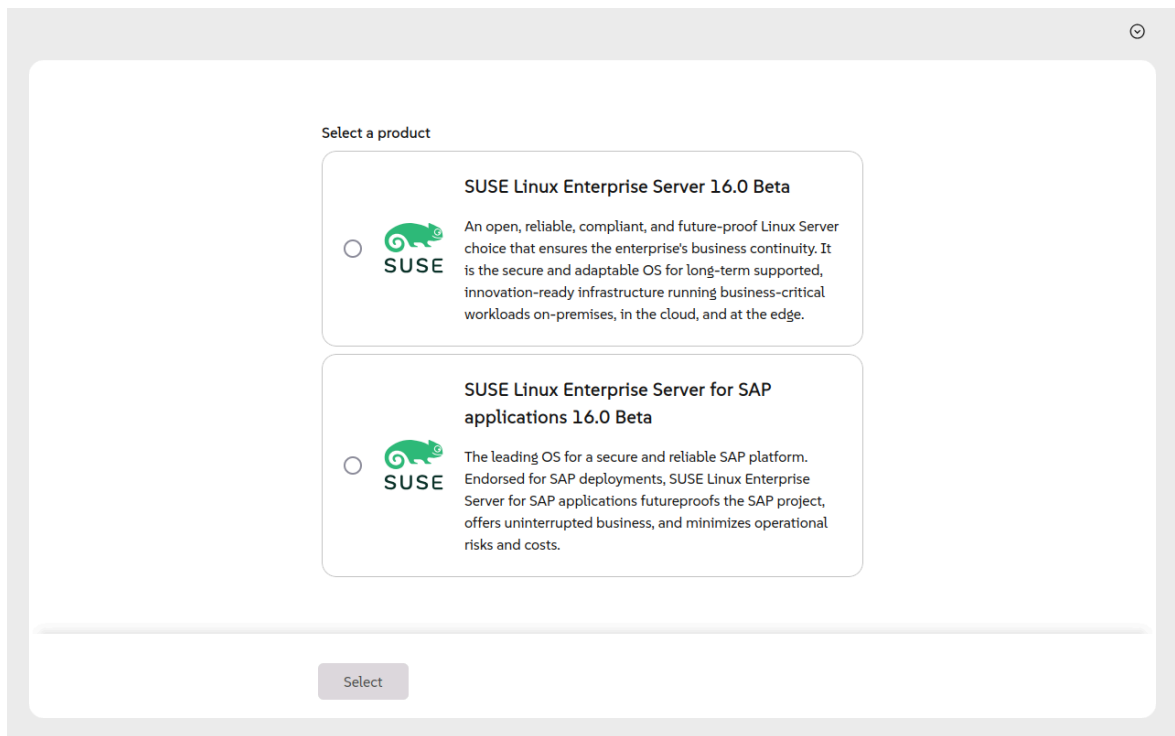
- ❶ URI du programme d'installation ISO monté à l'*Étape 1*
- ❷ Adresse IP du système à installer. Si vous ne définissez pas d'adresse, elle sera assignée avec DHCP et affichée sur la console après le démarrage. Comme la console est difficile à lire sur **x3270**, il est recommandé de configurer le réseau dans le fichier parmfile.

- ③ Adresse IP de la passerelle du système
  - ④ Adresse IP du serveur DNS du système
  - ⑤ Mot de passe de l'administrateur système root. Si vous ne définissez pas de mot de passe, un mot de passe aléatoire sera généré et affiché sur la console après le démarrage. Comme la console est difficile à lire sur **x3270**, il est recommandé de définir un mot de passe root dans le fichier `parmfile`.
4. (*Facultatif*) Pour une installation dans un environnement isolé physiquement ou sans enregistrement, ajoutez le paramètre `agama.install_url` au fichier `parmfile` à installer à partir du fichier `SLES-16.0-s390x-Beta2.install.iso` monté à l'*Étape 2* :

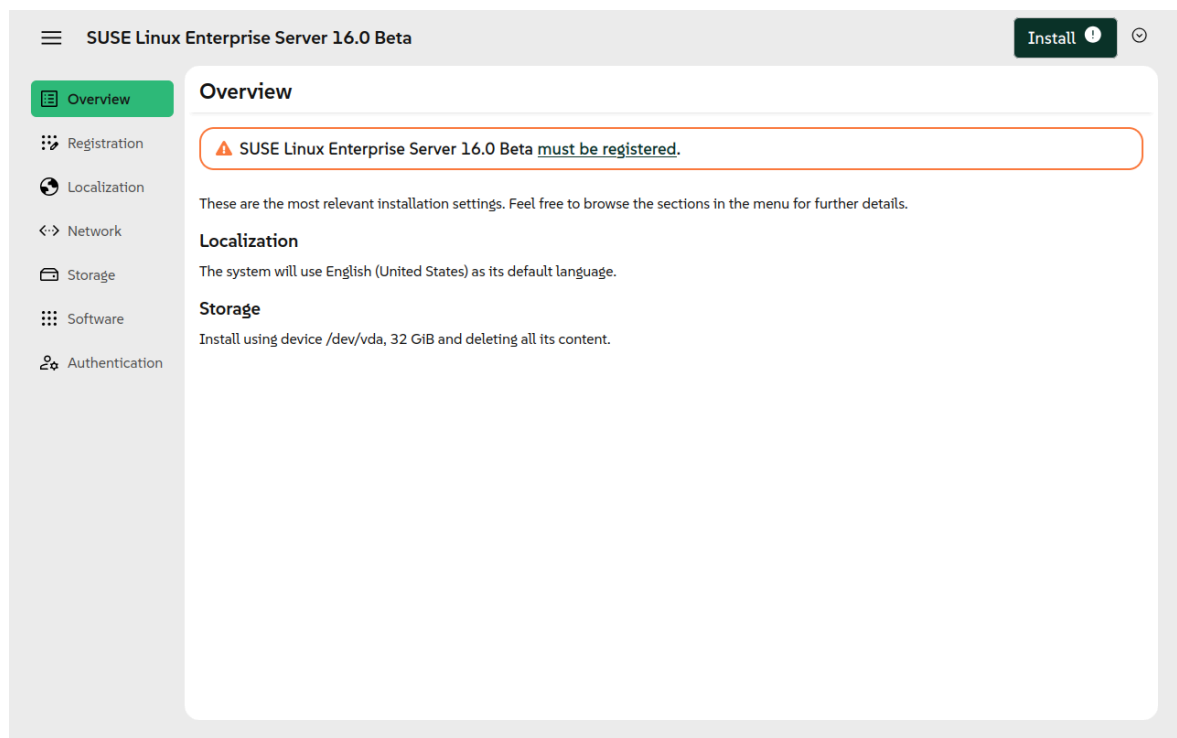
**EXEMPLE 2 : EXEMPLE DE FICHIER PARMFILE POUR L'INSTALLATION DANS UN ENVIRONNEMENT ISOLÉ PHYSIQUEMENT**

```
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. Ouvrez un navigateur Web pointant vers l'adresse IP indiquée dans le fichier `parmfile`. Entrez le mot de passe root, puis procédez à l'installation.
6. Sélectionnez SUSE Linux Enterprise Server for SAP Applications 16.0 pour l'installation et acceptez la licence pour pouvoir continuer.



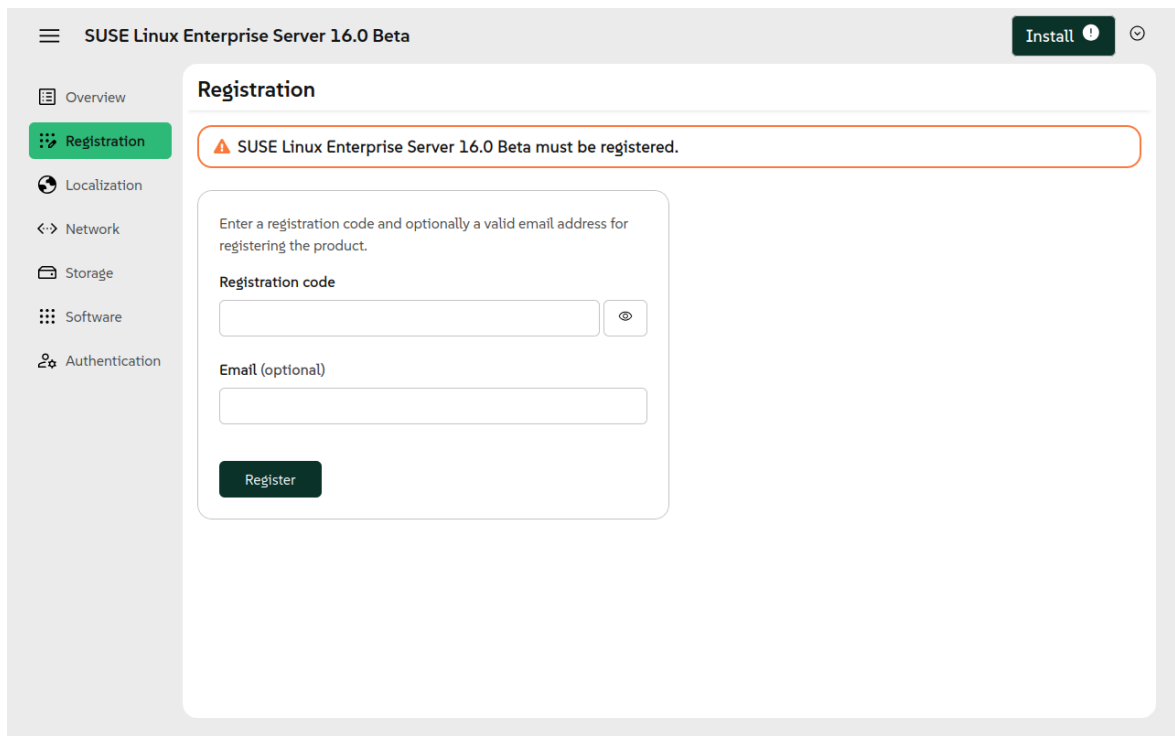
7. L'aperçu des paramètres d'installation les plus pertinents est affichée. Ajustez les paramètres en sélectionnant la catégorie dans le menu de gauche ou procédez directement à l'installation.



## Astuce : langue du programme d'installation et clavier

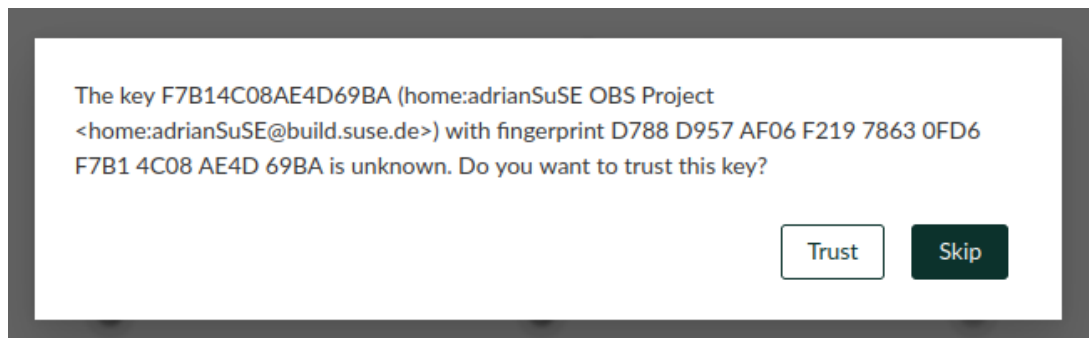
Cliquez sur le menu fléché dans le coin supérieur droit et sélectionnez *Options de l'installateur* pour modifier la langue et la disposition du clavier utilisées par le programme d'installation. La langue ne peut être modifiée que sur les installations locales. Si vous utilisez un navigateur Web pour une installation à distance, configurez la langue de contenu préférée dans les paramètres du navigateur et rechargez le programme d'installation.

8. Enregistrez votre produit. Entrez un code d'enregistrement et éventuellement une adresse électronique valide.



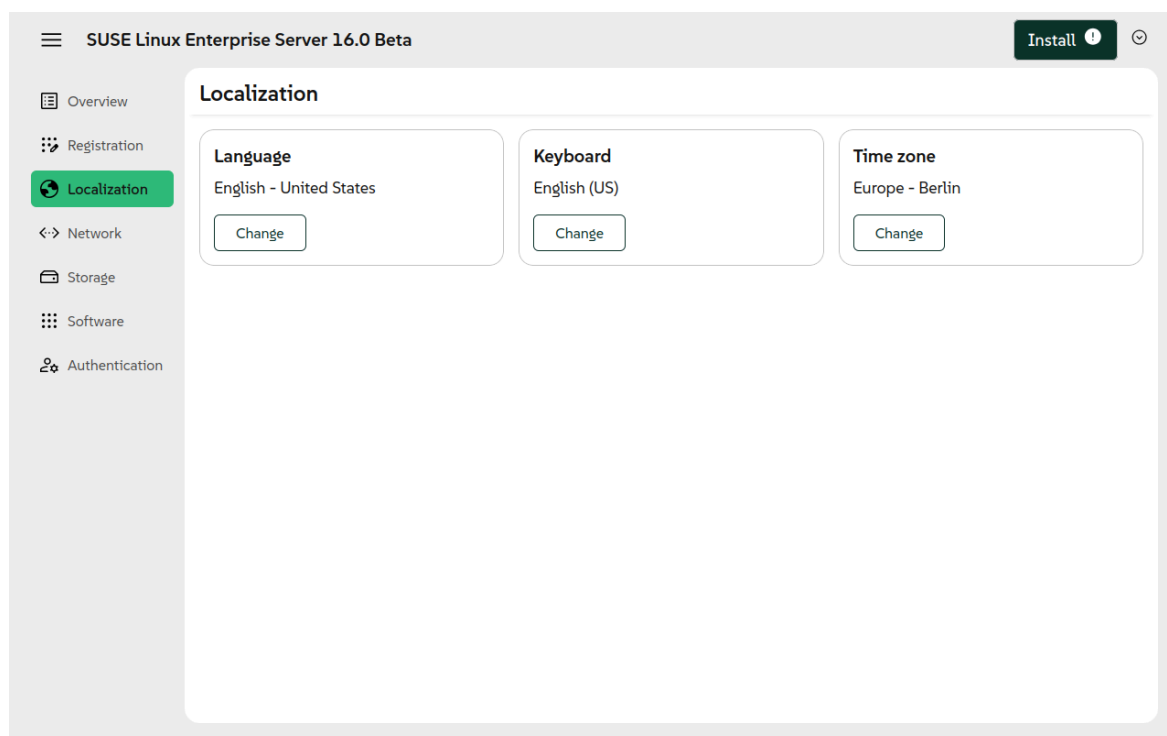
## Remarque : enregistrement facultatif des images signées avec la clé du développeur

Les images signées avec la clé du développeur peuvent vous permettre d'ignorer l'enregistrement avant l'installation. Si l'image de votre produit prend en charge l'installation sans enregistrement, une fenêtre contextuelle similaire à la suivante pourrait s'afficher :

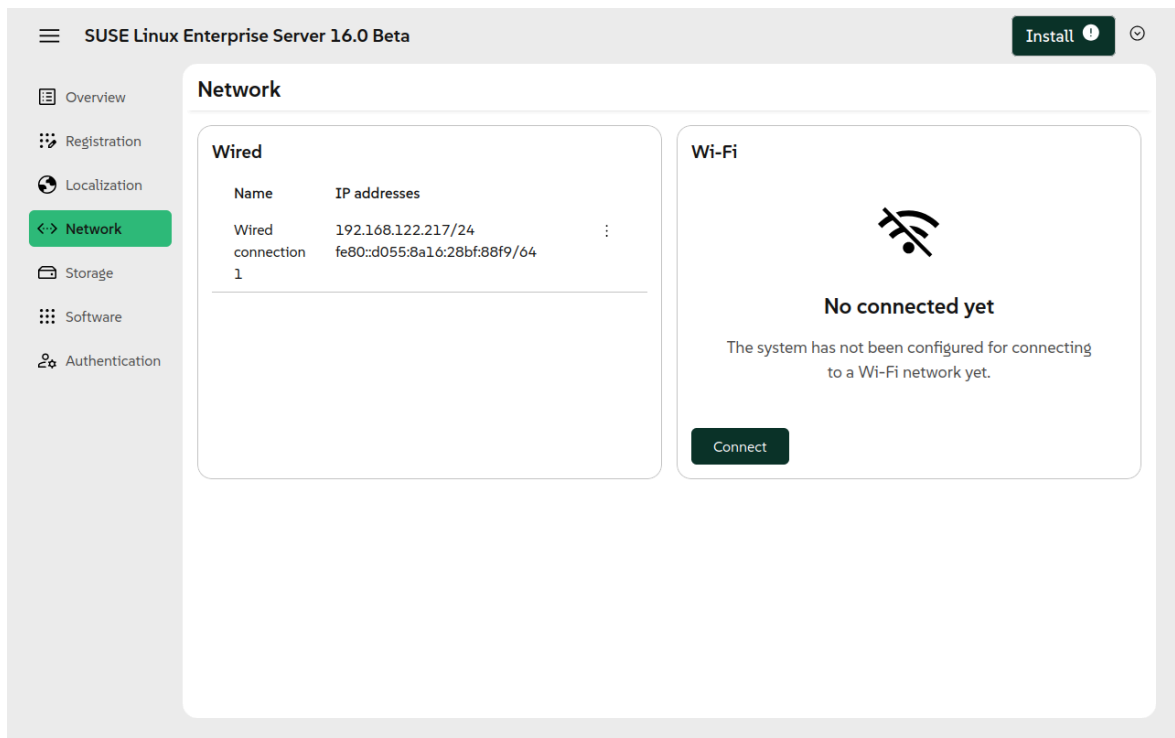


Pour effectuer l'installation sans enregistrement, sélectionnez *Approuver* dans la fenêtre contextuelle.

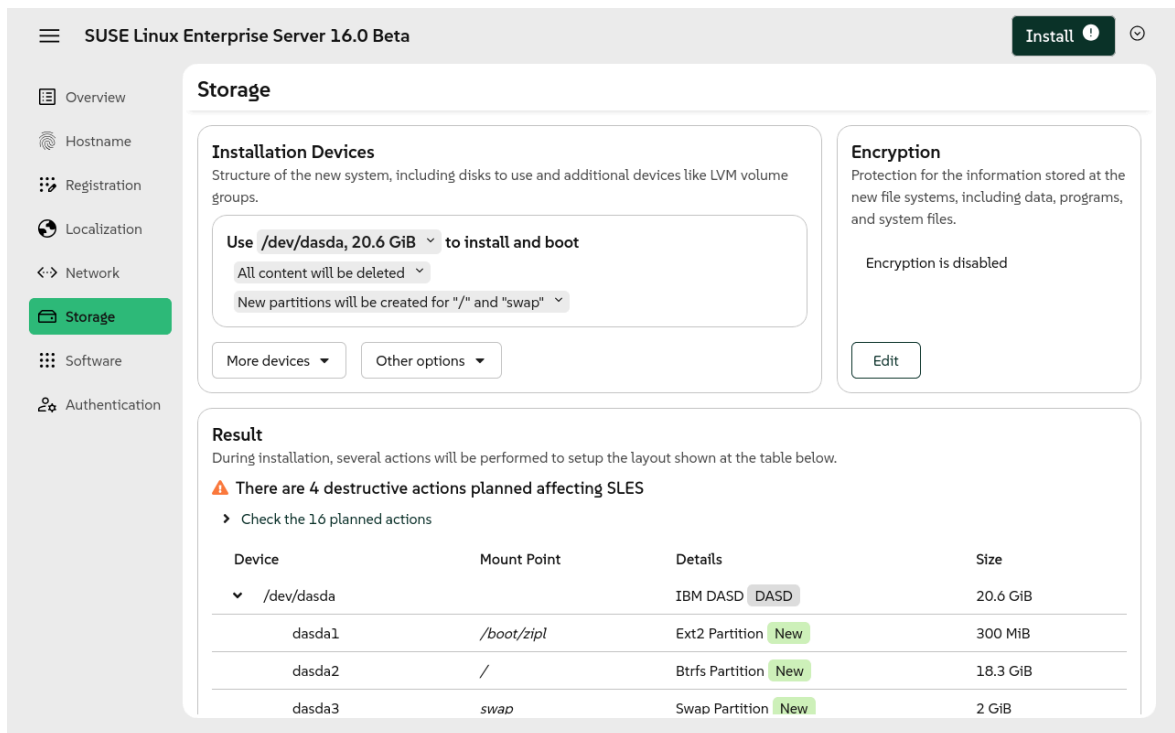
9. *(Facultatif)* Ajustez vos paramètres de localisation tels que la langue, la disposition du clavier et le fuseau horaire.



10. *(Facultatif)* Configurez vos paramètres réseau. Pour modifier une connexion réseau existante, cliquez sur le menu ellipse.



## 11. Sélectionnez un périphérique de stockage pour l'installation.



Actuellement, les installations sur disques simples ou LVM sont prises en charge. Pour changer de disque ou utiliser LVM, cliquez sur le nom du périphérique, puis sur le bouton *Autres périphériques* dans la section *Périphériques d'installation*.

Pour utiliser des périphériques DASD, iSCSI ou zFCP, vous devez d'abord les configurer. Cliquez sur *Autres options*, puis sélectionnez la technologie souhaitée. Les options DASD et zFCP ne sont disponibles que si les périphériques correspondants sont attachés.

Pour activer un disque DASD, sélectionnez-le dans la liste, puis cliquez sur *Effectuer une action* > *Activer*. Une fois le disque activé, vous pouvez le sélectionner dans l'écran précédent afin de l'installer.

Pour activer un disque zFCP, sélectionnez-le dans la liste, puis activez-le en cliquant sur le menu ellipse.

Pour détecter un disque iSCSI, sélectionnez l'initiateur iSCSI, puis cliquez sur *Découvrir les cibles iSCSI*.

Par défaut, les systèmes de fichiers seront alloués en tant que nouvelles partitions sur le périphérique sélectionné. Vous pouvez modifier ce comportement dans la liste déroulante intitulée *Tout le contenu sera supprimé* dans la section *Périphériques d'installation*. Les stratégies d'espace suivantes sont disponibles :

#### STRATÉGIES D'ESPACE

##### Supprimer le contenu actuel

Toutes les partitions seront supprimées et toutes les données sur les disques seront perdues.

##### Réduire les partitions existantes

Les données sont conservées, mais les partitions actuelles seront réduites si nécessaire.

##### Utiliser l'espace disponible

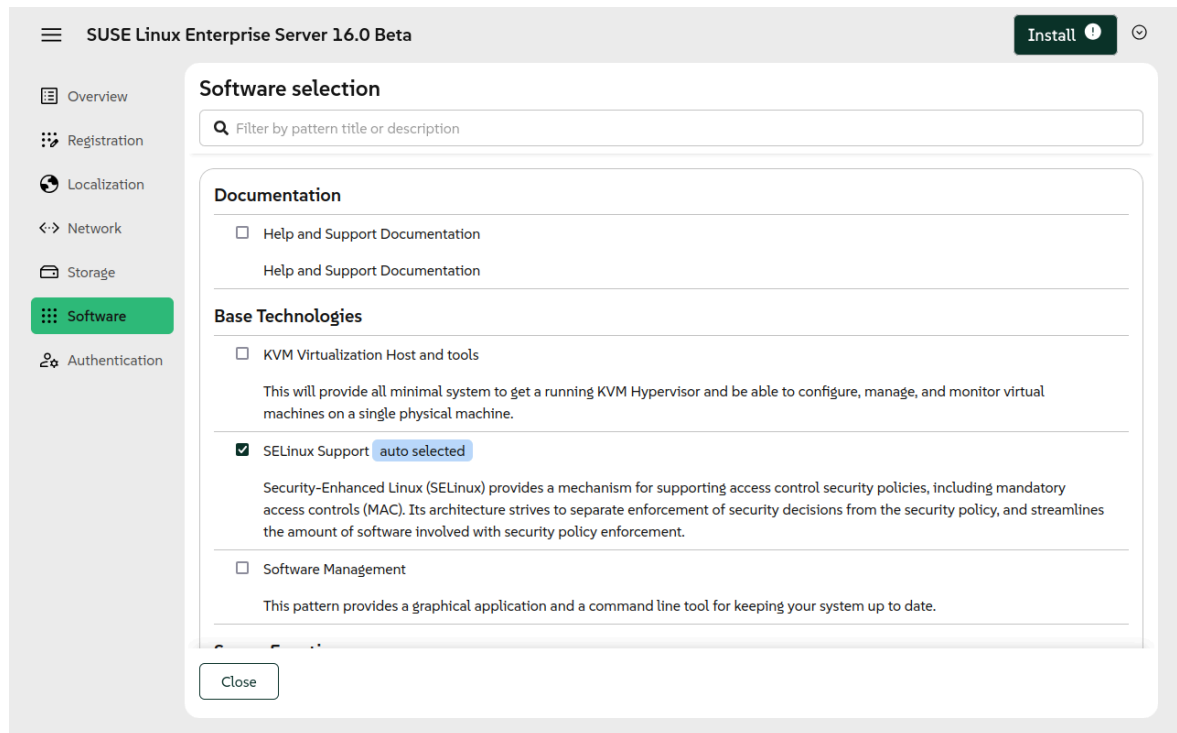
Les données sont conservées. Seul l'espace n'étant assigné à aucune partition sera utilisé.

##### Personnalisé

Sélectionnez l'action à effectuer pour chaque partition.

Pour modifier des partitions individuelles, développez la section *Partitions et systèmes de fichiers* en cliquant sur >. Vous pouvez éventuellement configurer les instantanés Btrfs, les options de démarrage et activer le chiffrement complet du disque.

12. (Facultatif) Ajoutez des logiciels supplémentaires à installer, tels que l'hyperviseur KVM ou le service de gestion du système Cockpit.



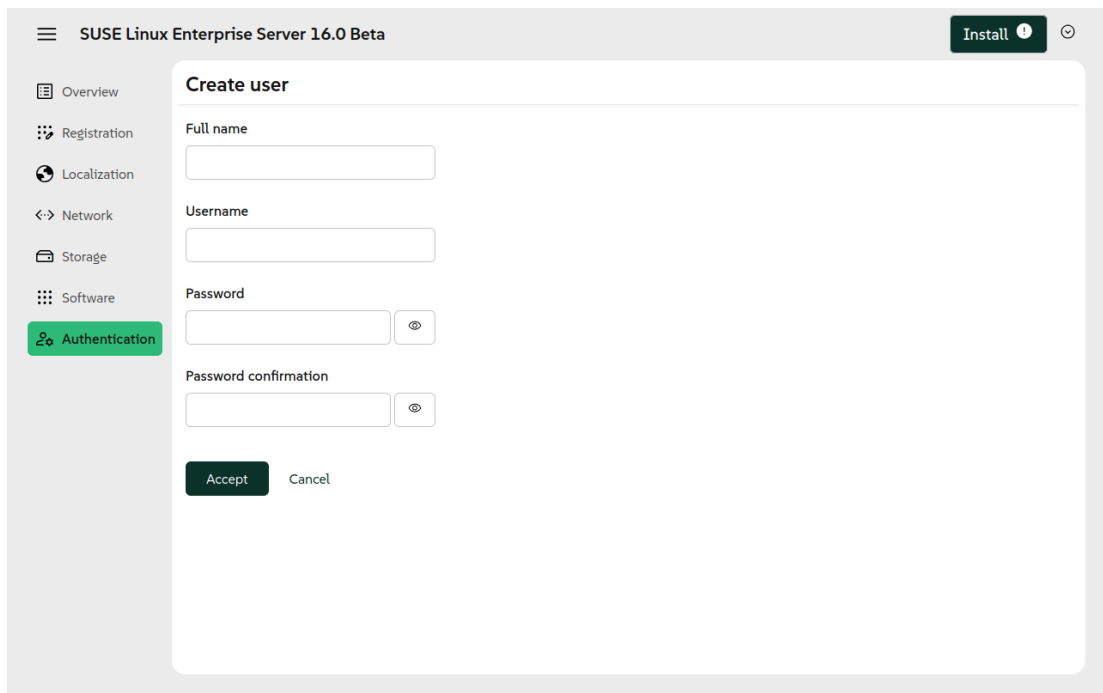
13. Configurez les paramètres d'authentification.



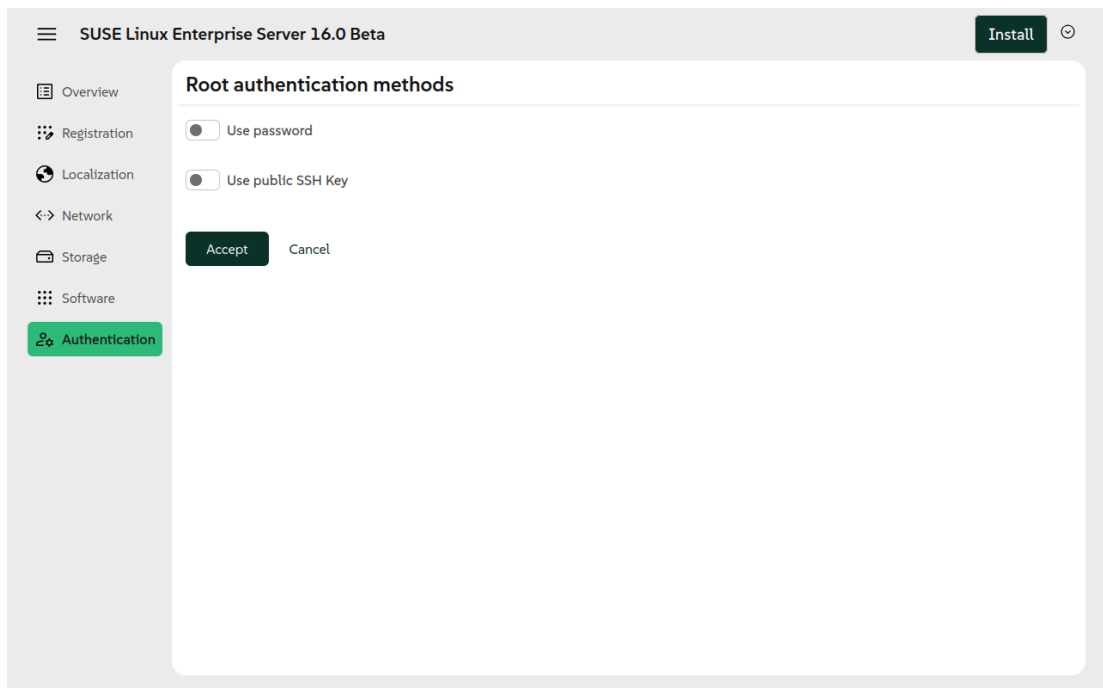
### Important : aucun accès root à SSH

L'accès à SSH par l'utilisateur `root` est désactivé par défaut. Par conséquent, il est vivement recommandé de créer un utilisateur système. Le premier utilisateur du système se voit accorder les privilèges `sudo` automatiquement et peut également être utilisé pour accéder à Cockpit.

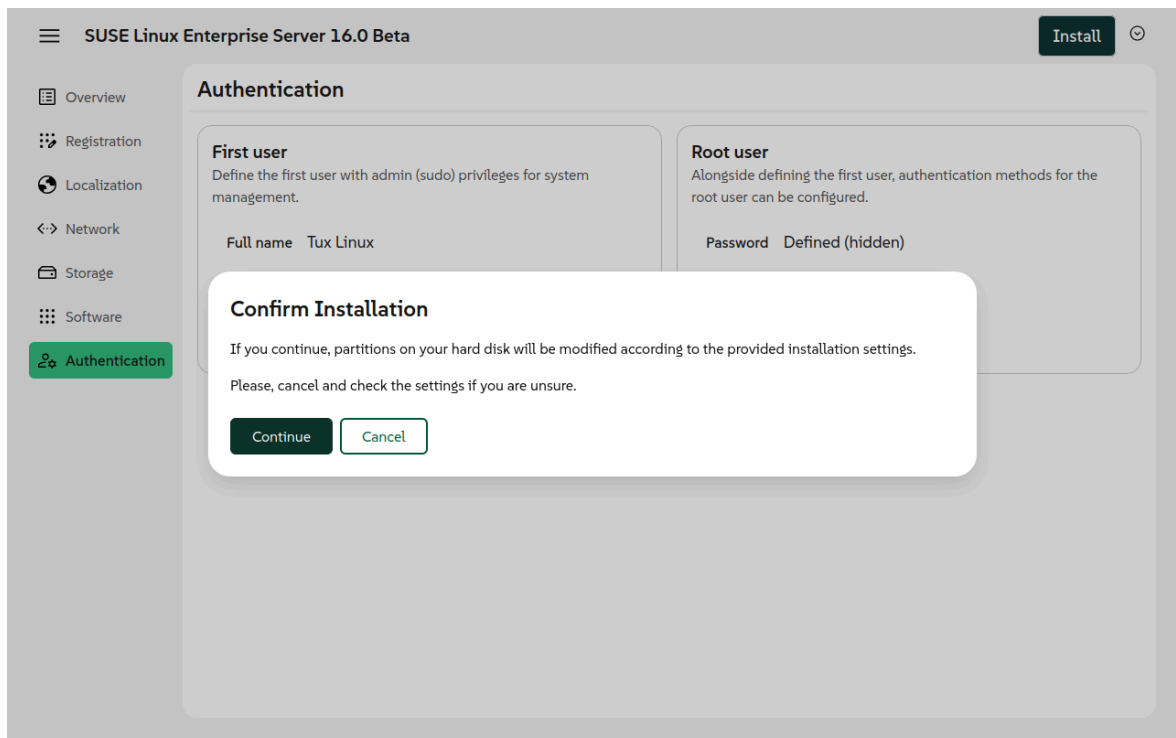
- a. Créez un utilisateur non-root. Cliquez sur *Définir un utilisateur maintenant* et indiquez des informations détaillées telles que son nom d'utilisateur et son mot de passe.



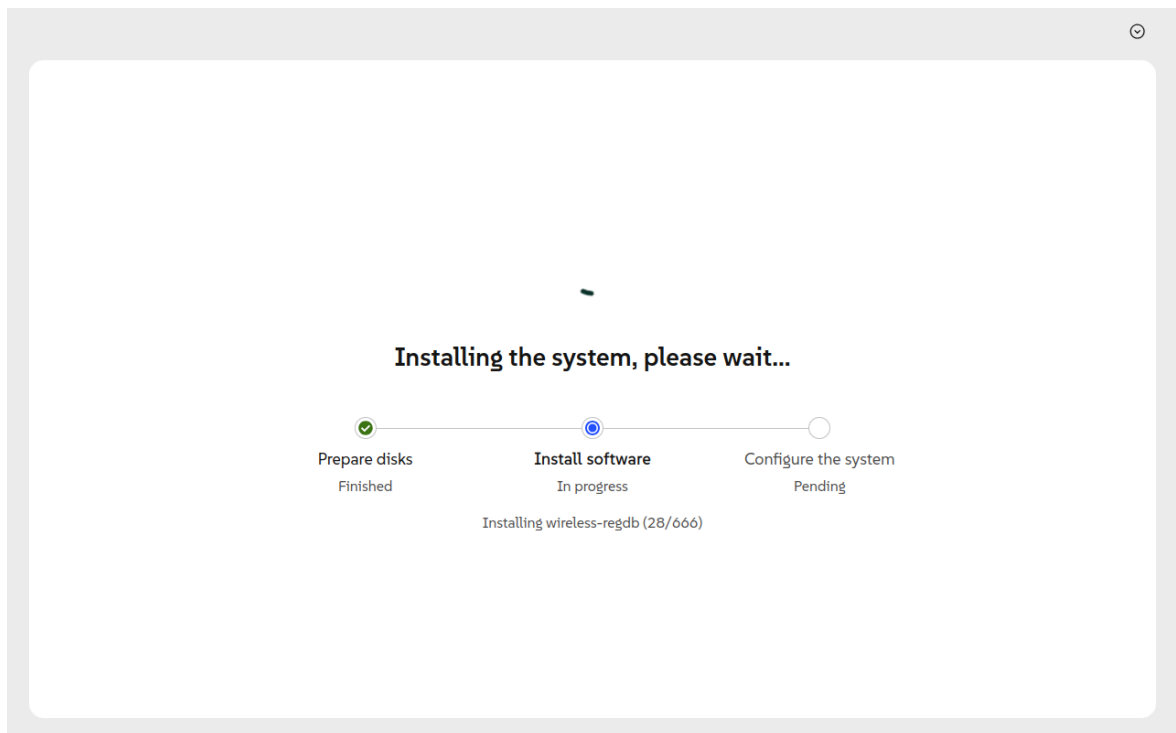
- b. Configurez les méthodes d'authentification pour l'utilisateur root. Vous pouvez utiliser un mot de passe sécurisé, une clé publique SSH ou les deux.



14. Cliquez sur *Installer*, puis confirmez pour démarrer l'installation.



15. Attendez la fin de l'installation du système. L'installation prend environ 30 minutes.

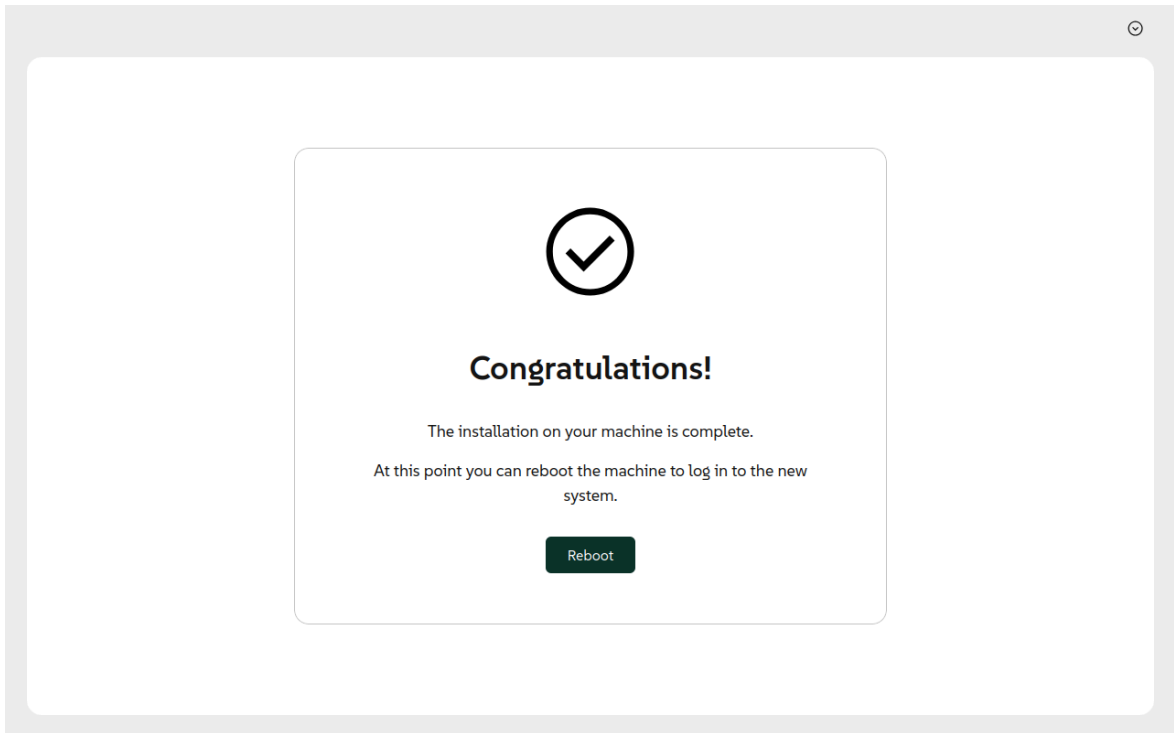




## Astuce : journaux d'installation

Vous pouvez utiliser le menu fléché en haut à droite de la fenêtre pour afficher les journaux et les messages système.

16. Une fois l'installation terminée, sélectionnez *Redémarrer*.



## 2.4 Résumé

Une fois les vérifications de configuration, l'enregistrement, l'installation et le redémarrage du produit réussis, vérifiez que vous pouvez vous connecter et utiliser votre système.

### PROCÉDURE 2 : VÉRIFICATION DU SYSTÈME APRÈS L'INSTALLATION

1. Connectez-vous au système en tant qu'utilisateur 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:L5PQdXeaN9edpLw0z29LWxCNKe26EWWWtNFopxMgn3U (ECDSA)
SSH host key: SHA256:CKA9BVCHu5jKhECTUSyBGQRyDQQMReyIfUIOR/nDsXY (ED25519)
enp1s0: 192.168.122.40 fe80::a486:c31a:e64:6c0c

Hint: Num Lock on

localhost login: root
Password: _
```

2. Pour vérifier que votre système fonctionne comme prévu, exécutez quelques commandes de base.

```
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:L5PQdXeaN9edpLw0z29LWxCNKe26EWWWtNFopxMgn3U (ECDSA)
SSH host key: SHA256:CKA9BVCHu5jKhECTUSyBGQRyDQQMReyIfUIOR/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 Informations supplémentaires

Pour plus d'informations sur des rubriques connexes, reportez-vous aux ressources suivantes :

- Documentation du projet Open Source Agama : <https://agama-project.github.io/docs> ↗
- Documentation IBM pour les distributions SUSE : <https://www.ibm.com/docs/en/linux-on-systems?topic=distributions-suse-linux-enterprise-server> ↗

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