

# Manuelles Installieren von SUSE Linux Enterprise Server mit Agama

## WAS?

In diesem Artikel wird beschrieben, wie Sie SUSE Linux Enterprise Server mithilfe von Agama installieren. Die hier aufgeführten Informationen gelten für die Installation der Produkte sowohl auf Bare-Metal- als auch auf virtuellen Maschinen.

## WARUM?

Lesen Sie diesen Artikel, um mehr über die Installation von SUSE Linux Enterprise Server mit Agama zu erfahren.

## AUFWAND

Sie benötigen etwa 15 Minuten, um diesen Artikel zu lesen.

## ZIEL

Erfahren, wie Sie SUSE Linux Enterprise Server mithilfe von Agama manuell installieren.

## ANFORDERUNGEN

- Ein Bare-Metal-Server oder eine virtuelle Maschine. Für
- Serverinstallationen ohne Desktop-Umgebung empfiehlt SUSE mindestens 1 CPU, 2 GB Arbeitsspeicher und 32 GB Speicher (einschließlich Speicherplatz für Btrfs-Snapshots in der Root-Partition, Swap-Space und Speicher für Softwarepakete).

- Ein aktiver Registrierungscode für das Produkt, das Sie
- installieren möchten. Sie können im SUSE Customer Center einen Registrierungscode für das Produkt generieren und das Abonnement für Ihr Unternehmen aktivieren.



### Anmerkung: Optionale Registrierung

Bei bestimmten Bildern, die mit dem Schlüssel des Entwicklers signiert sind, können Sie die Registrierung vor oder während der Installation überspringen. Außerdem können bestimmte Images alle installierbaren Pakete für Ihr Betriebssystem enthalten, die Sie als Offline-Paket-Repository verwenden können. In solchen Fällen benötigen Sie vor der Installation möglicherweise keinen aktiven Registrierungscode. Wenn Sie jedoch Softwarepakete aus den offiziellen Online-Repositorys verwenden, empfiehlt SUSE, Ihr Produkt beim SUSE Customer Center zu registrieren.

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# 1 Einführung in Agama

Dieser Abschnitt bietet einen kurzen Überblick über Agama, das Standardinstallationsprogramm für SUSE Linux Enterprise Server 16.0 und spätere Versionen.

## 1.1 Was ist Agama?

Agama ist ein flexibles und leistungsstarkes Open Source-Installationsprogramm, das von SUSE entwickelt wurde. Sie können es verwenden, um unterstützte SUSE Linux Enterprise Server-Versionen auf einer Vielzahl von Computerarchitekturen manuell oder automatisiert zu installieren. Die auf Agama basierende Installationsmethode bietet eine intuitive Oberfläche für *sofort einsatzbereite* Images für verschiedene Anwendungsfälle und Workloads. In Kombination mit Cockpit und Ansible ersetzt es YaST in SUSE Linux Enterprise Server.

# 2 Installieren von SUSE Linux Enterprise Server mit Agama

In diesem Abschnitt wird beschrieben, wie SUSE Linux Enterprise Server mithilfe der auf Agama basierenden ISO-Image-Datei installiert wird.

## 2.1 Einführung

In den folgenden Abschnitten wird das auf Agama basierende manuelle Installationsverfahren für SUSE Linux Enterprise Server beschrieben. Die Informationen gelten sowohl für die Installation auf Bare-Metal- als auch auf virtuellen Maschinen.

## 2.2 Anforderungen

- Eine auf Agama basierende ISO-Image-Datei für unterstützte Versionen von SUSE Linux Enterprise Server. Sie können diese von SUSE Customer Center herunterladen und die Prüfsumme überprüfen, um die Integrität sicherzustellen.



## Anmerkung: Verfügbare Images für Produkte

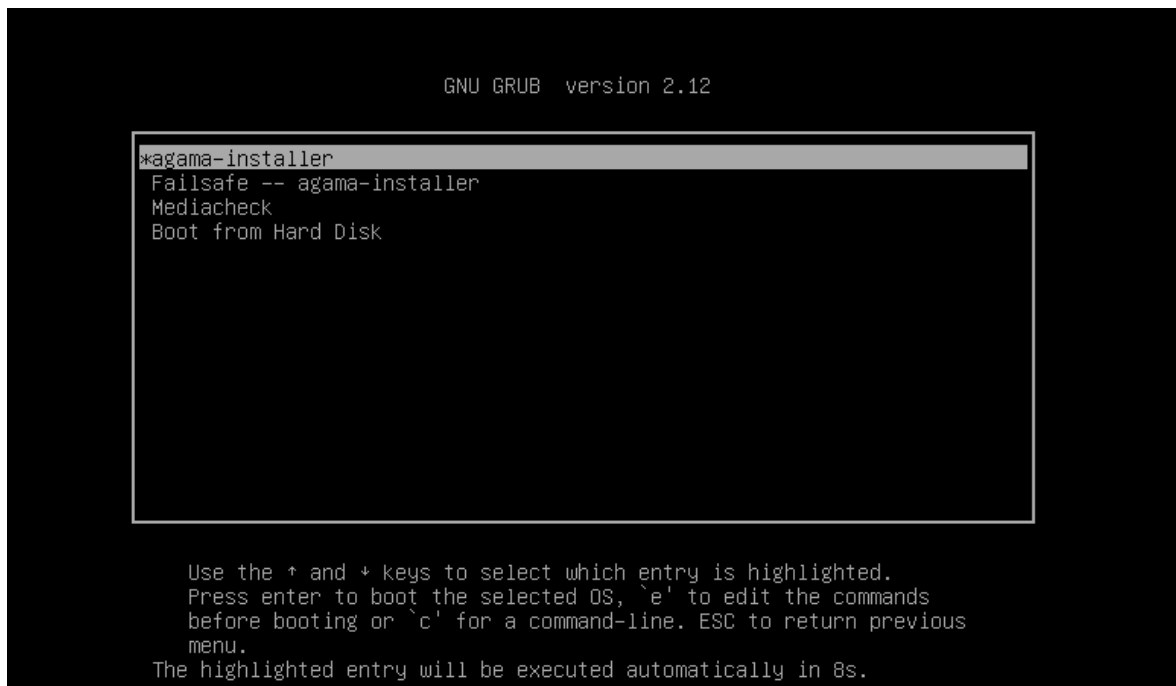
Das auf Agama basierende Installations-Image ist für SUSE Linux Enterprise Server 16.0 und spätere Versionen verfügbar.

## 2.3 Manuelles Installieren von SUSE Linux Enterprise Server für x86\_64 mit Agama

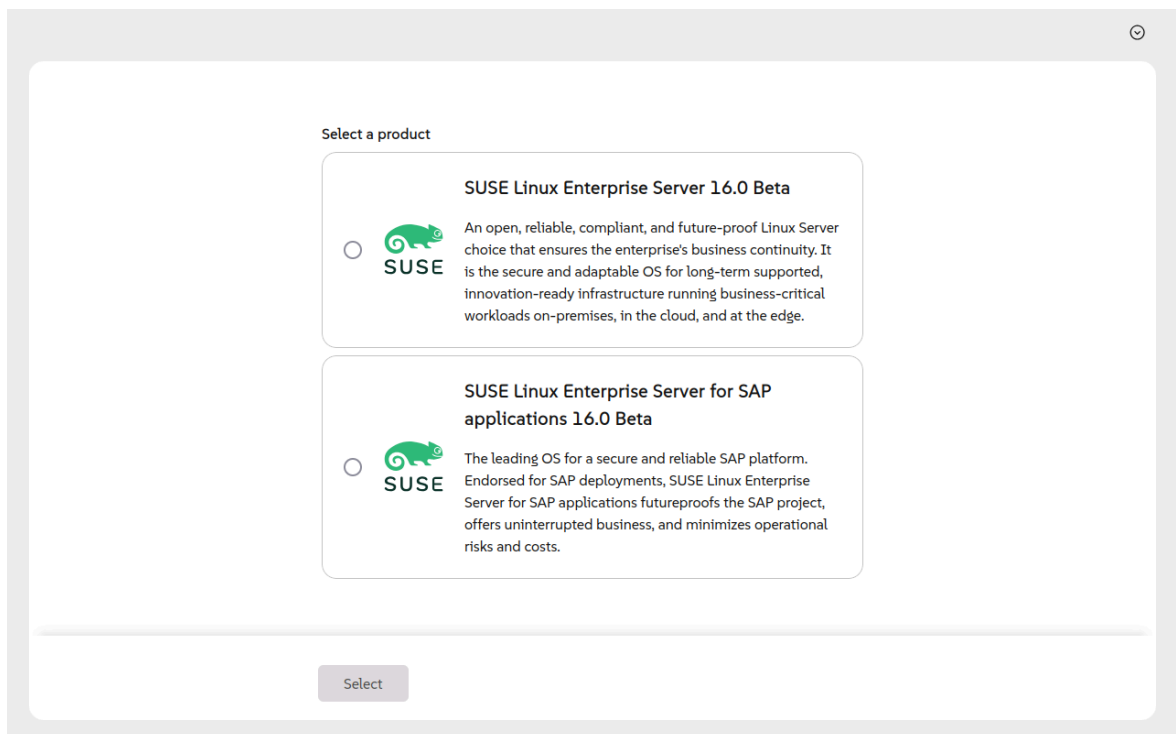
Wenn Sie SUSE Linux Enterprise Server mithilfe von Agama manuell installieren möchten, führen Sie die folgenden Schritte aus:

### VORGEHEN 1: MANUELLE INSTALLATION VON SUSE LINUX ENTERPRISE SERVER MIT AGAMA

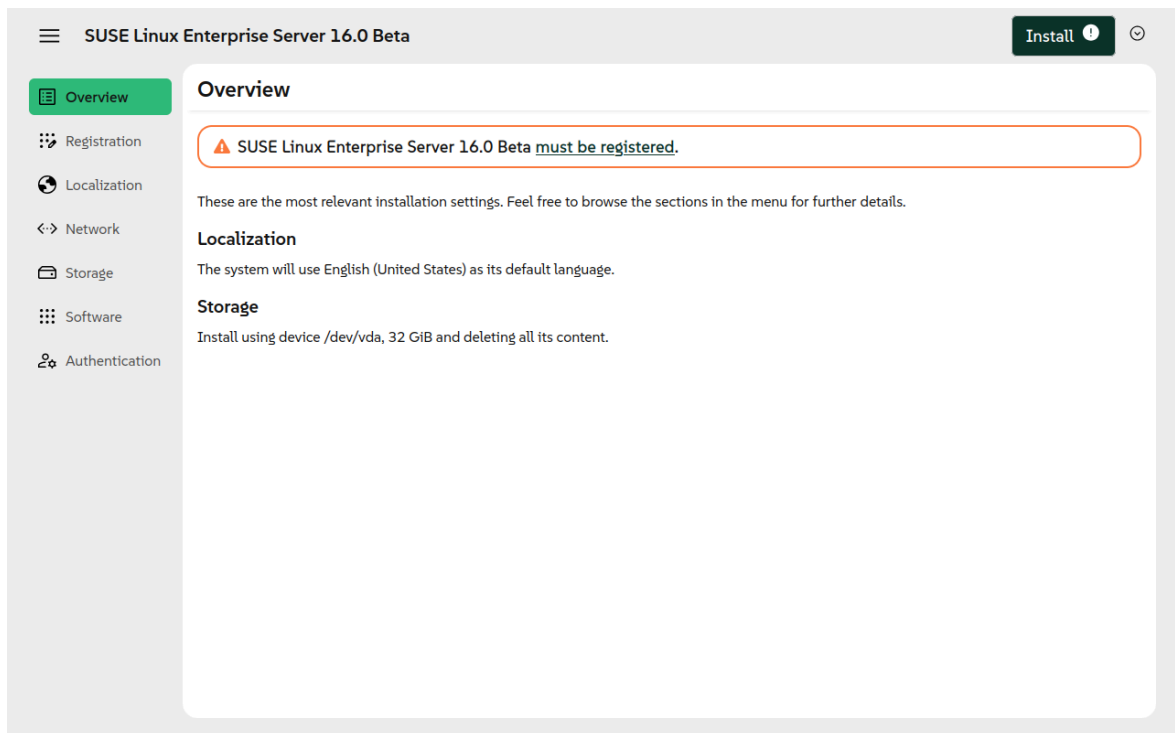
1. Wählen Sie ein bootfähiges Medium aus und starten Sie den Installationsvorgang.
  - Wählen Sie bei einem Bare-Metal-Server das Gerät oder Laufwerk aus, von dem gebootet werden soll.
  - Wählen Sie für einen VM-Gast den Pfad zur Image-Datei aus und erstellen Sie eine virtuelle Maschine mit einer Konfiguration, die für die erwartete Arbeitslast geeignet ist.
2. Wählen Sie im GRUB 2-Bootmenü *agama-installer* aus.



3. Wählen Sie SUSE Linux Enterprise Server 16.0 für die Installation aus und akzeptieren Sie die Lizenz, um fortzufahren.



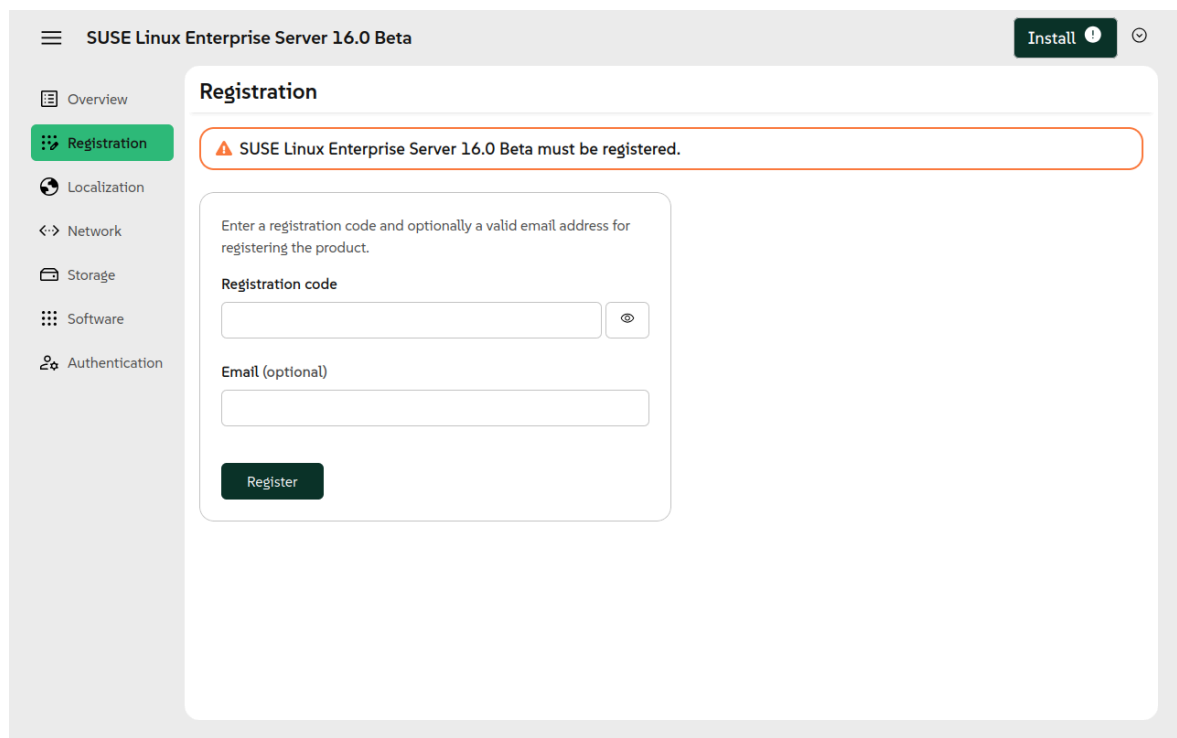
- Die Übersicht der wichtigsten Installationseinstellungen wird angezeigt. Passen Sie die Einstellungen an, indem Sie die Kategorie aus dem Menü auf der linken Seite auswählen, oder fahren Sie direkt mit der Installation fort.



### Tipp: Sprache und Tastatur des Installationsprogramms

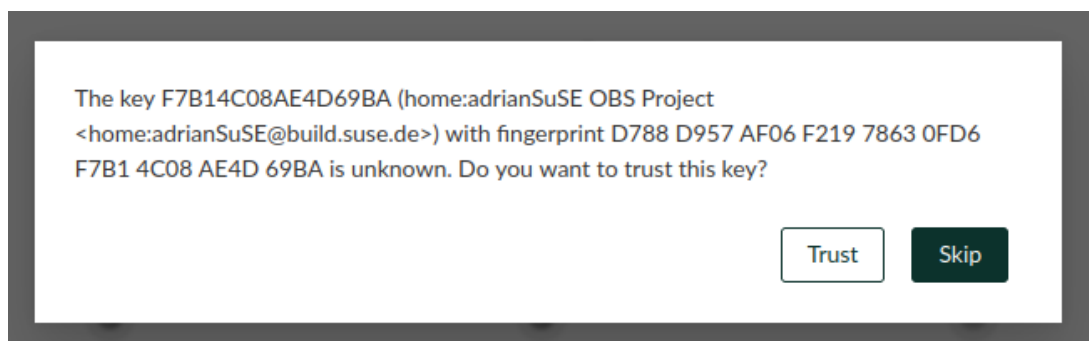
Klicken Sie auf das Pfeilmü in der oberen rechten Ecke und wählen Sie *Optionen des Installationsprogramms* aus, um die vom Installationsprogramm verwendete Sprache und das Tastaturlayout zu ändern. Die Sprache kann nur bei lokalen Installationen geändert werden. Wenn Sie einen Webbrowser für eine Ferninstallation verwenden, konfigurieren Sie die bevorzugte Inhaltssprache in den Browsereinstellungen und laden Sie das Installationsprogramm erneut.

- Produktregistrierung Geben Sie einen Registrierungscode und optional eine gültige E-Mail-Adresse ein.



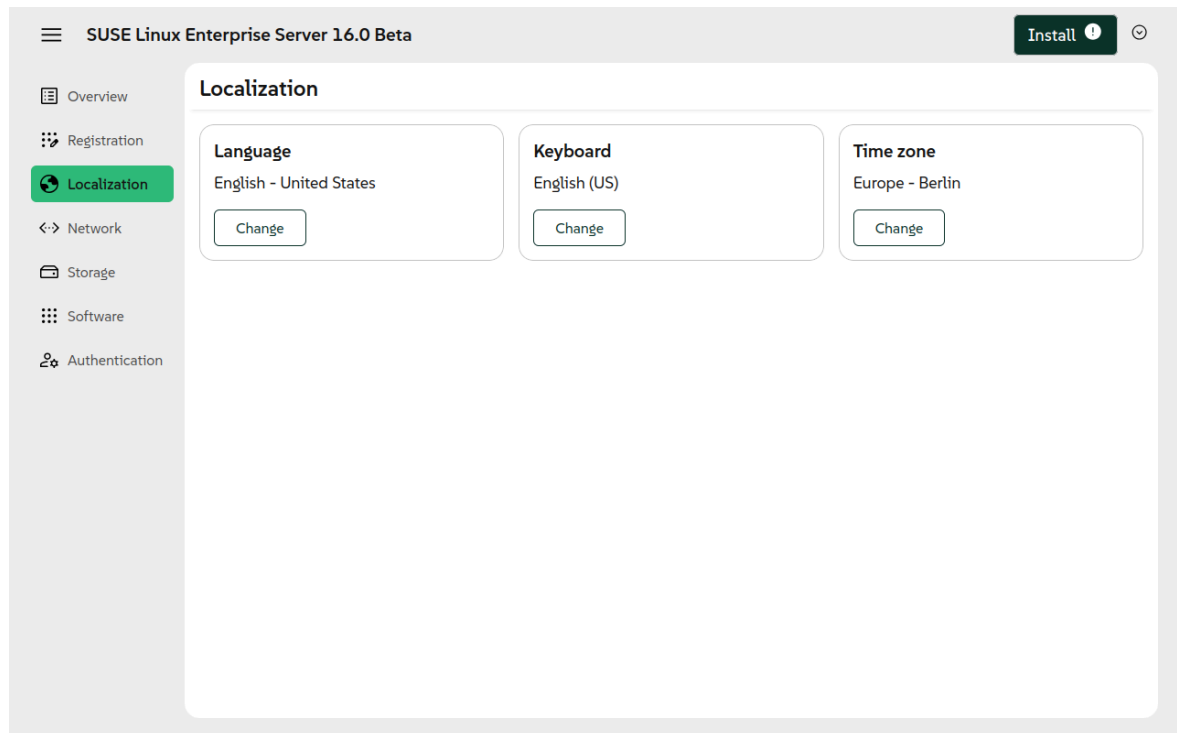
## Anmerkung: Optionale Registrierung für Images, die mit dem Schlüssel des Entwicklers signiert wurden

Bei Images, die mit dem Schlüssel des Entwicklers signiert wurden, können Sie die Registrierung vor der Installation überspringen. Wenn das Image Ihres Produkts die Installation ohne Registrierung unterstützt, wird möglicherweise ein Pop-up ähnlich dem Folgenden angezeigt:

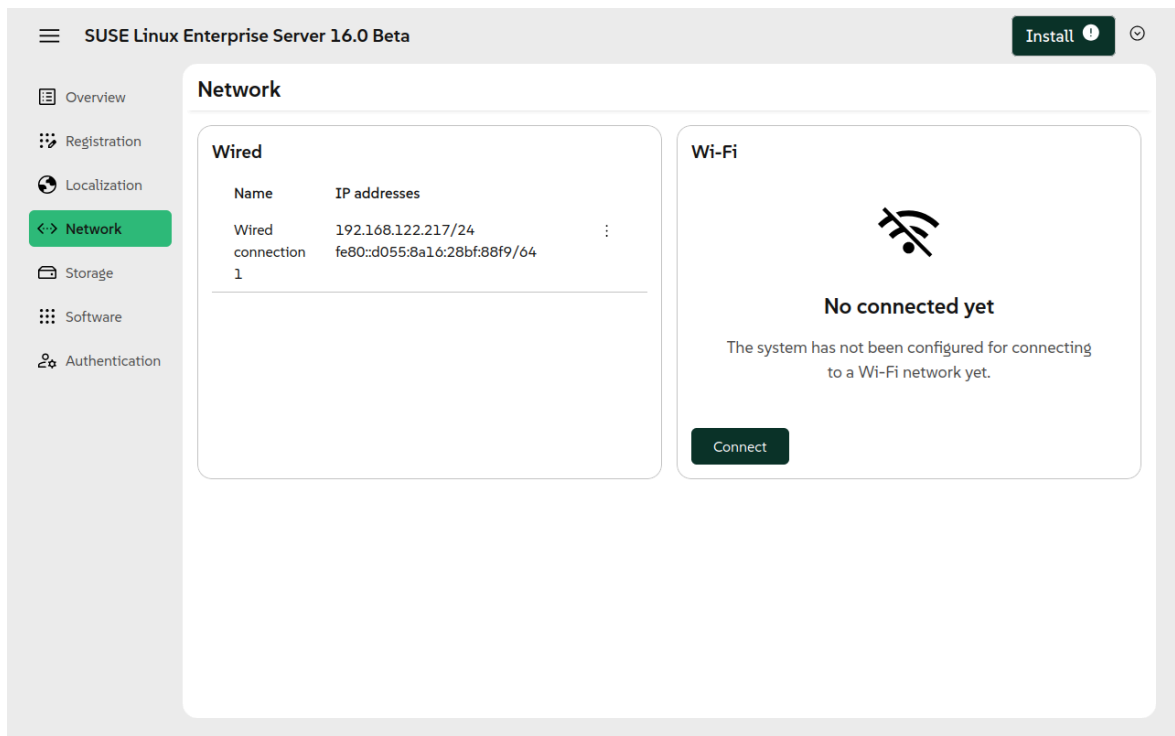


Um die Installation ohne Registrierung durchzuführen, wählen Sie im Pop-up *Trust* (Vertrauen) aus.

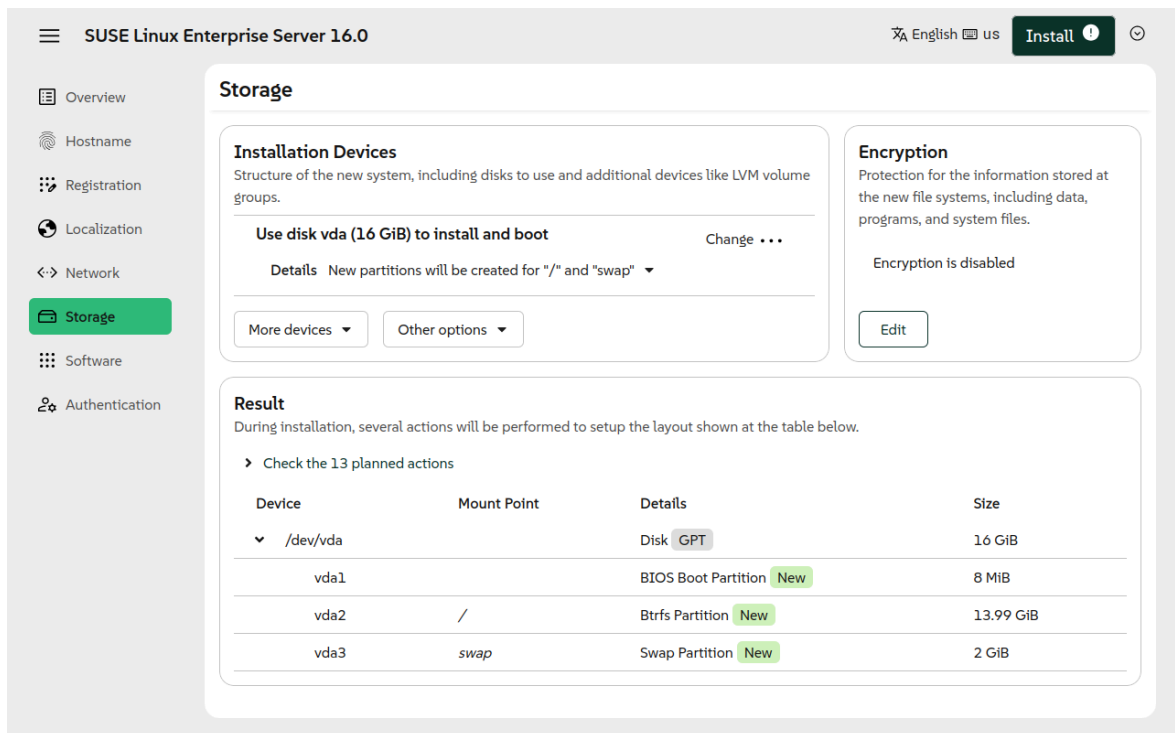
6. (Optional) Passen Sie Ihre Lokalisierungseinstellungen wie Sprache, Tastaturlayout und Zeitzone an.



7. (Optional) Konfigurieren Sie Ihre Netzwerkeinstellungen. Wenn Sie eine bestehende Netzwerkverbindung bearbeiten möchten, klicken Sie auf die drei Punkte.



## 8. Wählen Sie ein Speichergerät für die Installation aus.



Derzeit werden Installationen auf einzelnen Datenträgern oder LVM unterstützt. Um den Datenträger zu wechseln oder LVM zu verwenden, klicken Sie im Abschnitt *Installationsgeräte* auf die Schaltfläche *Weitere Optionen* für den Gerätenamen.

Um eine iSCSI-Festplatte zu erkennen, wählen Sie den iSCSI-Initiator aus und klicken Sie auf *iSCSI-Ziele ermitteln*.

Standardmäßig werden die Dateisysteme als neue Partitionen auf dem ausgewählten Gerät zugewiesen. Sie können dieses Verhalten in der Dropdownliste mit der Bezeichnung *Alle Inhalte werden gelöscht* in Abschnitt *Installationsgeräte* ändern. Die folgenden Speicherrichtlinien stehen zur Verfügung:

#### SPEICHERRICHTLINIEN

##### Aktuellen Inhalt löschen

Alle Partitionen werden entfernt und alle Daten auf den Datenträgern gehen verloren.

##### Vorhandene Partitionen verkleinern

Die Daten bleiben erhalten, aber die aktuellen Partitionen werden nach Bedarf verkleinert.

##### Verfügbaren Speicherplatz nutzen

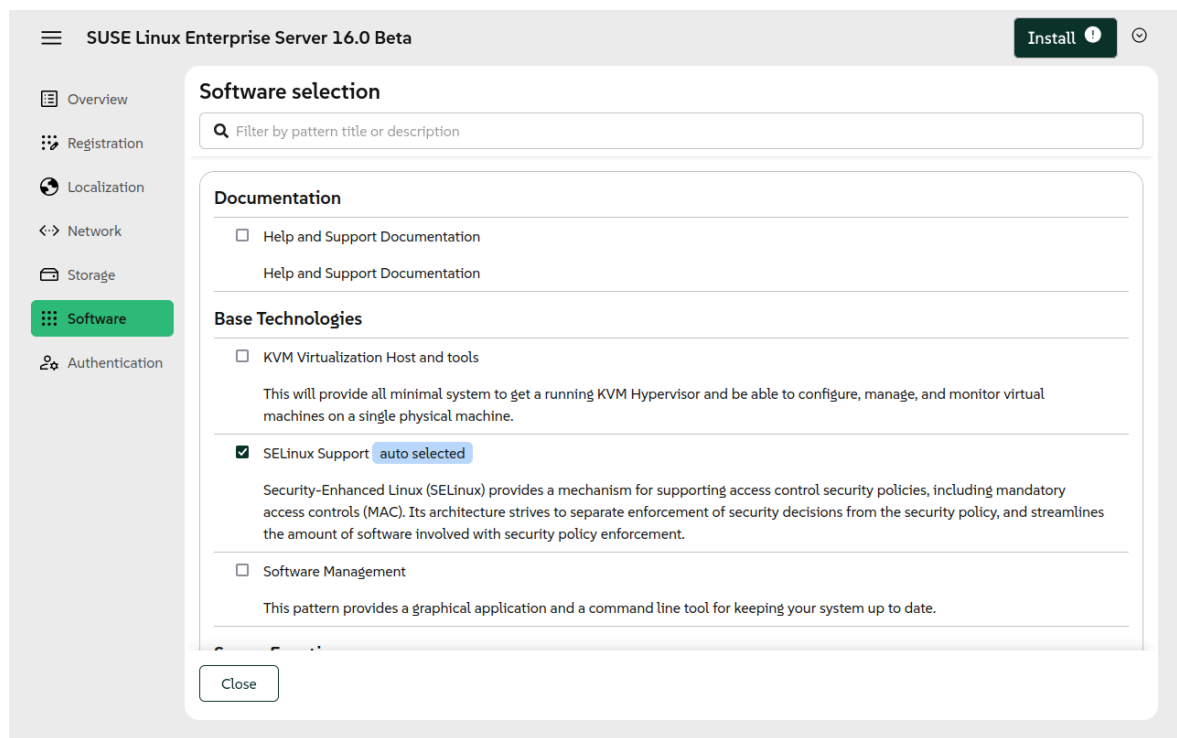
Die Daten bleiben erhalten. Es wird nur der Speicherplatz verwendet, der keiner Partition zugewiesen ist.

##### Benutzerdefiniert

Wählen Sie aus, was mit jeder Partition geschehen soll.

Um einzelne Partitionen zu bearbeiten, erweitern Sie den Abschnitt *Partitionen und Dateisysteme*, indem Sie auf > klicken. Optional können Sie Btrfs-Snapshots und Boot-Optionen konfigurieren und die vollständige Datenträgerverschlüsselung (FDE) aktivieren.

9. (*Optional*) Fügen Sie der Installation zusätzliche Software hinzu, z. B. den KVM-Hypervisor oder den Cockpit-Systemverwaltungsdienst.



## 10. Konfigurieren Sie die Authentifizierungseinstellungen.



### Wichtig: Kein SSH-Zugriff für root

Der SSH-Zugriff für root ist standardmäßig deaktiviert. Daher wird dringend empfohlen, einen Systembenutzer anzulegen. Der erste Systembenutzer erhält automatisch sudo-Rechte und kann auch für den Zugriff auf Cockpit verwendet werden.

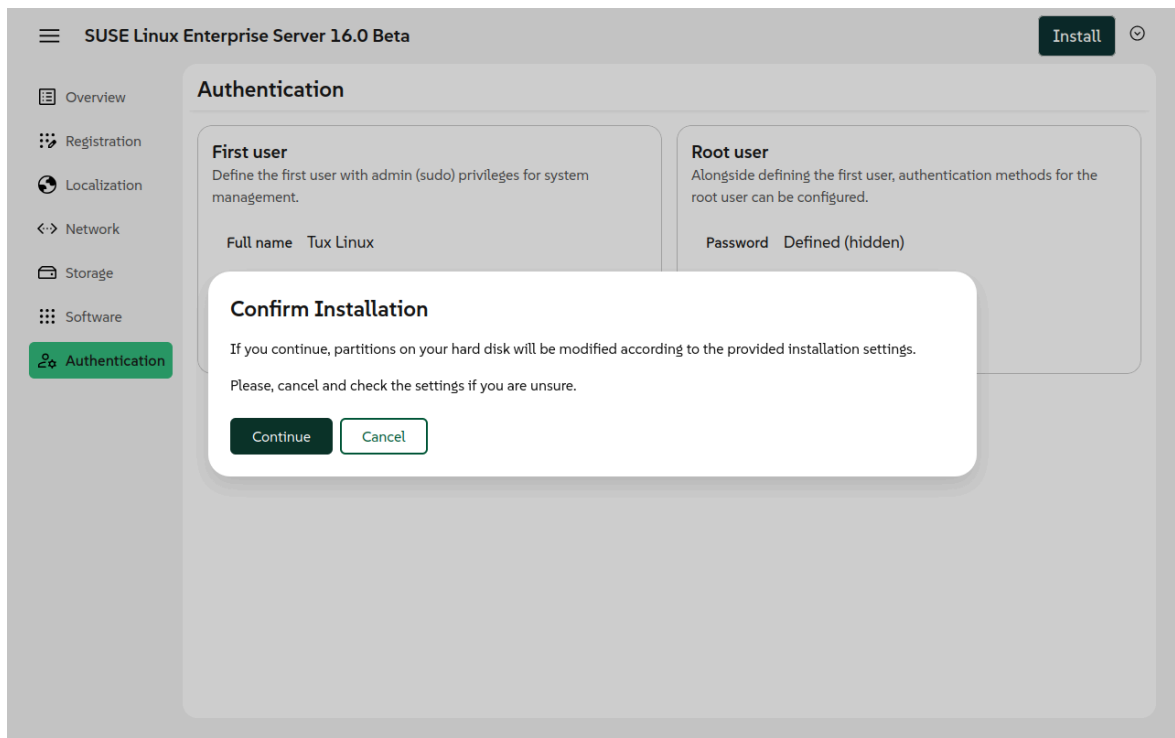
- a. Erstellen Sie einen Nicht-root-Benutzer. Klicken Sie auf *Jetzt einen Benutzer definieren* und geben Sie Details wie Benutzername und Passwort ein.

The screenshot shows the 'Create user' form in the SUSE Linux Enterprise Server 16.0 Beta installation interface. The form is titled 'Create user' and is located in the 'Authentication' section of the left-hand navigation menu. The form contains four input fields: 'Full name', 'Username', 'Password', and 'Password confirmation'. The 'Password' and 'Password confirmation' fields have eye icons to toggle visibility. At the bottom of the form, there are two buttons: 'Accept' and 'Cancel'.

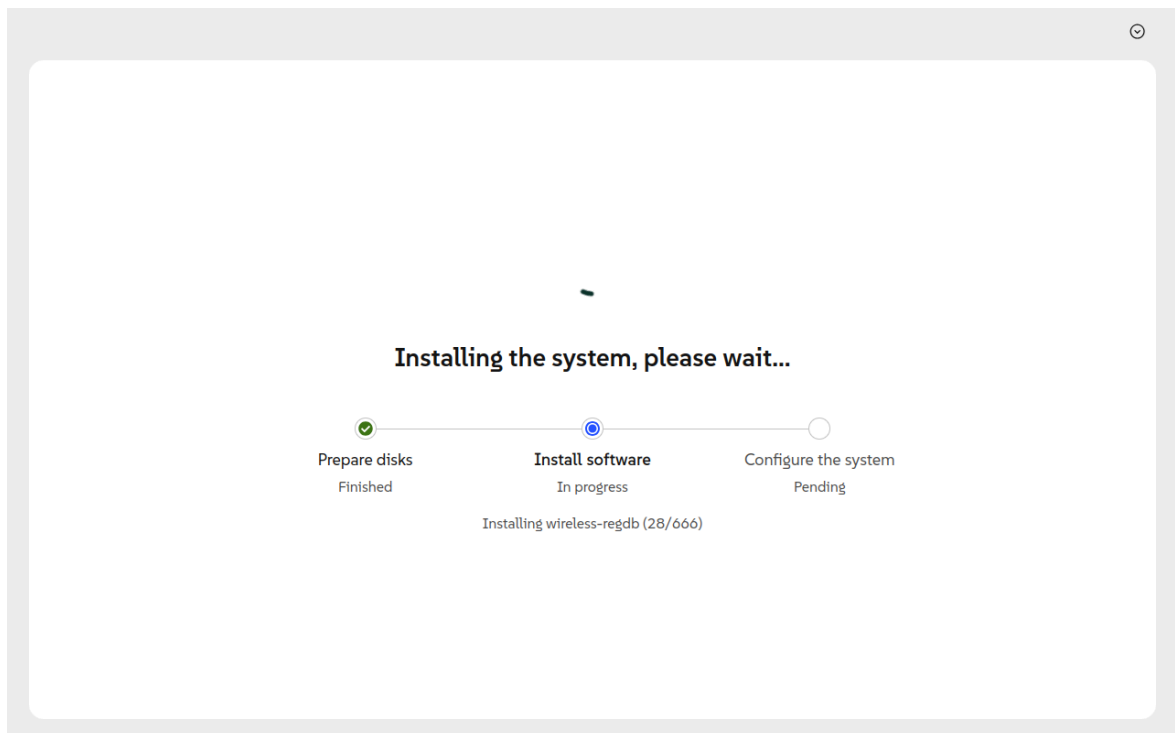
- b. Konfigurieren Sie die Authentifizierungsmethoden für root. Sie können ein sicheres Passwort, einen öffentlichen SSH-Schlüssel oder beides verwenden.

The screenshot shows the 'Root authentication methods' form in the SUSE Linux Enterprise Server 16.0 Beta installation interface. The form is titled 'Root authentication methods' and is located in the 'Authentication' section of the left-hand navigation menu. The form contains two radio button options: 'Use password' and 'Use public SSH Key'. At the bottom of the form, there are two buttons: 'Accept' and 'Cancel'.

11. Klicken Sie auf *Installieren* und bestätigen Sie, um die Installation zu starten.



12. Warten Sie, bis die Systeminstallation abgeschlossen ist. Es dauert etwa 30 Minuten, bis die Installation abgeschlossen ist.

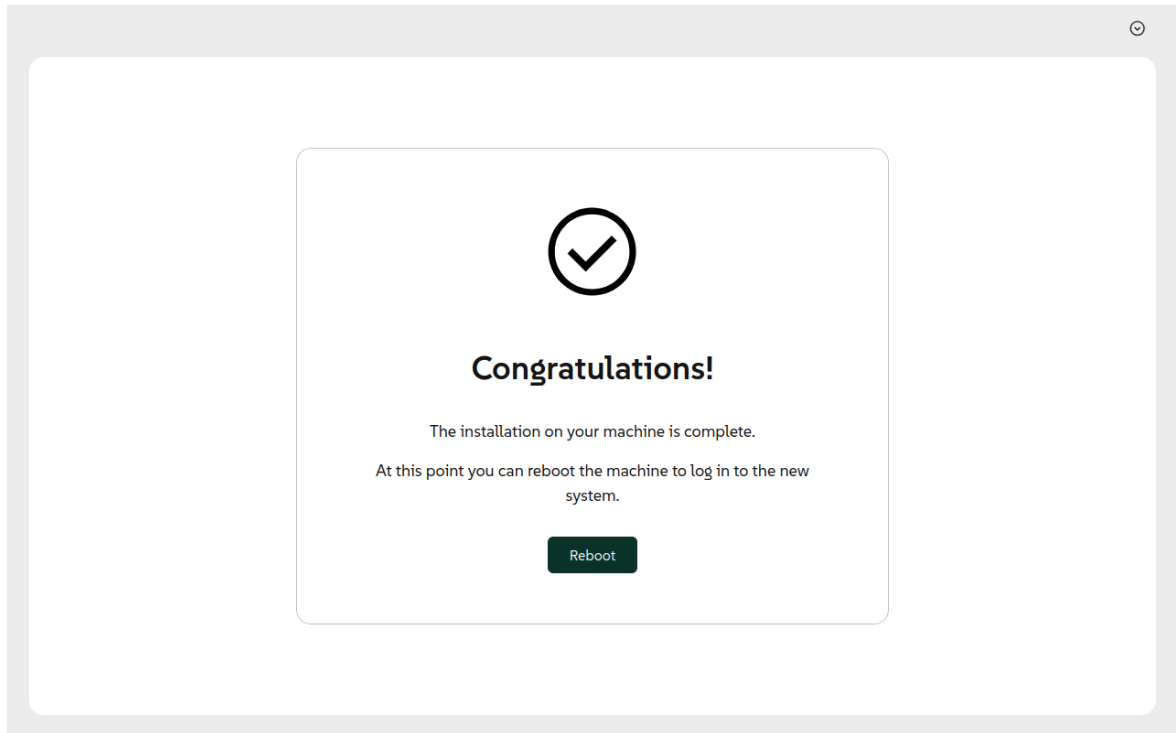




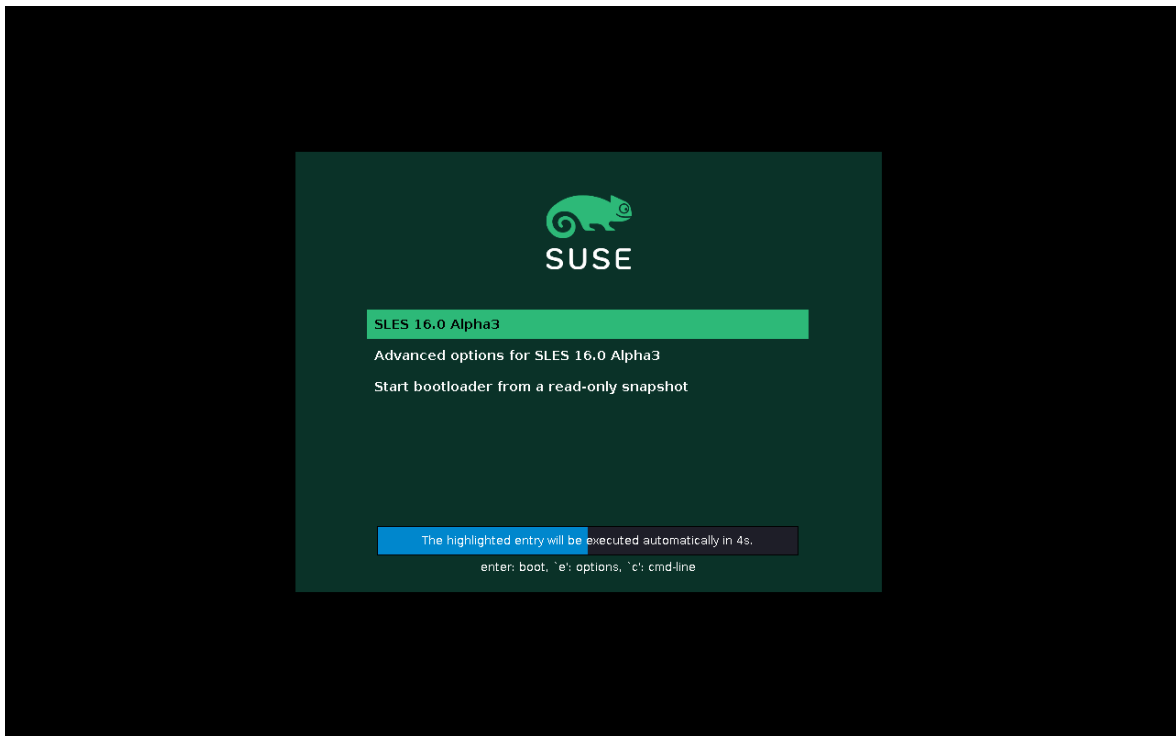
## Tipp: Installationsprotokolle

Sie können das Pfeilmü in der oberen rechten Ecke des Fensters verwenden, um die Protokolle und Systemmeldungen anzuzeigen.

13. Sobald die Installation abgeschlossen ist, wählen Sie *Neu starten*.



14. Starten Sie das neu installierte System mithilfe des GRUB 2-Boot-Menüs.



## 2.4 Zusammenfassung

Stellen Sie nach erfolgreichen Konfigurationsprüfungen, einer erfolgreichen Produktregistrierung sowie Installation und Neustart sicher, dass Sie sich anmelden und Ihr System verwenden können.

### VORGEHEN 2: ÜBERPRÜFUNG DES SYSTEMS NACH DER INSTALLATION

1. Melden Sie sich beim System als root-Benutzer an.

```
Welcome to SUSE Linux Enterprise Server 16.0 Alpha3 (x86_64) - Kernel 6.4.0-sifo.1.8-default (tty1).
SSH host key: SHA256:bVpdqEfAYuo1gbMY0s70qIdMEHHC/eKikm7cL3kwCMA (RSA)
SSH host key: SHA256:L5PQdXeaN9edpLw0zZ9LWxCNKe26EWWtNFopxMgn3U (ECDSA)
SSH host key: SHA256:CKA9BUChu5 jKhECTUSyBGQRyDQQMReyIfUI0R/mDsXY (ED25519)
enp1s0: 192.168.122.40 fe80::a486:c31a:e64:6c0c

Hint: Num Lock on

localhost login: root
Password: _
```

2. Führen Sie einige grundlegende Kommandos aus, um zu überprüfen, ob Ihr System wie erwartet funktioniert.

```
Welcome to SUSE Linux Enterprise Server 16.0 Alpha3 (x86_64) – Kernel 6.4.0-s1fo.1.8-default (tty1).

SSH host key: SHA256:bUpdqEfAYuo1gbMY0s70qIdMEHHC/eKikm7cL3kwCMA (RSA)
SSH host key: SHA256:L5PQdXeaN9edpLw0z29LWxCNKe26EWWWtNFopxMgm3U (ECDSA)
SSH host key: SHA256:CKA9BUChu5 jKhECTUSyBGQRyOQQMReyIfUI0R/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 Weitere Informationen

Informationen zu verwandten Themen finden Sie in den folgenden Ressourcen:

- Dokumentation des Agama Open Source-Projekts: <https://agama-project.github.io/docs>

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