



Default Passwords and Policies

Table of contents

BMC Passwords

UEFI Menu Password

Default Password

Software Downgrade

Password Reset

Default Password Policy

Disabling Default Password Policy

GRUB Password

Ubuntu Password Policy

BMC Passwords

The BMC password must comply with the following policy parameters:

- Using ASCII and Unicode characters is permitted
- Minimum length: 12
- Maximum length: 20
- Maximum number of consecutive character pairs: 4

Info

Two characters are consecutive if

```
|hex(char_1)-hex(char_2)|=1.
```

Examples of passwords with 5 consecutive character pairs

(invalid): `DcBa123456AbCd!`; `ab1XbcYcdZdeGef!`;

`Testing_123abcgh!`.

The following is a valid example password:

- `HelloNvidia3D!`

Note

A user account is locked for 10 minutes after 10 consecutive failed attempts.

UEFI Menu Password

A password is required to enter the UEFI menu during BlueField bootup. The UEFI menu contains various settings which impact BlueField behavior. Therefore, it is very important to keep that password secure.

Default Password

1. A first-time user accessing the UEFI menu must enter the default password for the UEFI menu, `bluefield`:



2. The user is prompted to provide a new password:



Note

The new password entered above must be in compliance with the [password policy](#):

- The password must be between 12 and 64 characters (inclusive)
- There are no requirements for upper/lower case, or special characters. Spaces are allowed.

3. The user is prompted to confirm the new password:

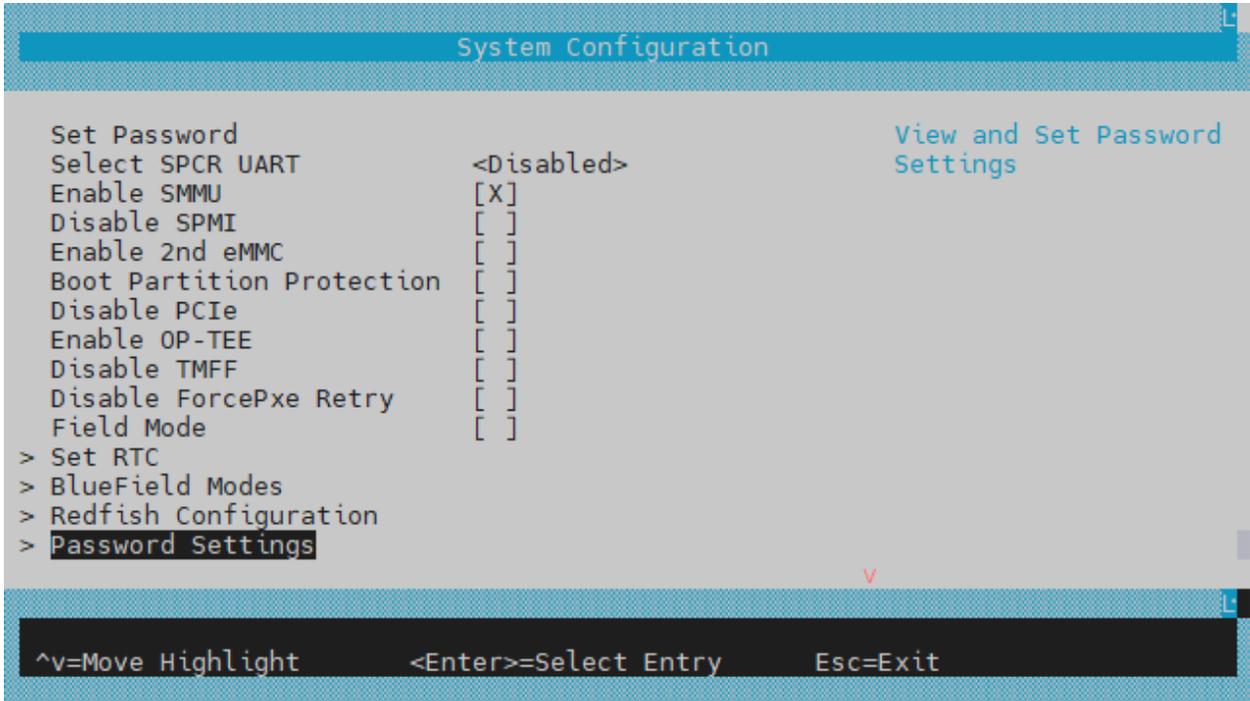


Default Password Policy

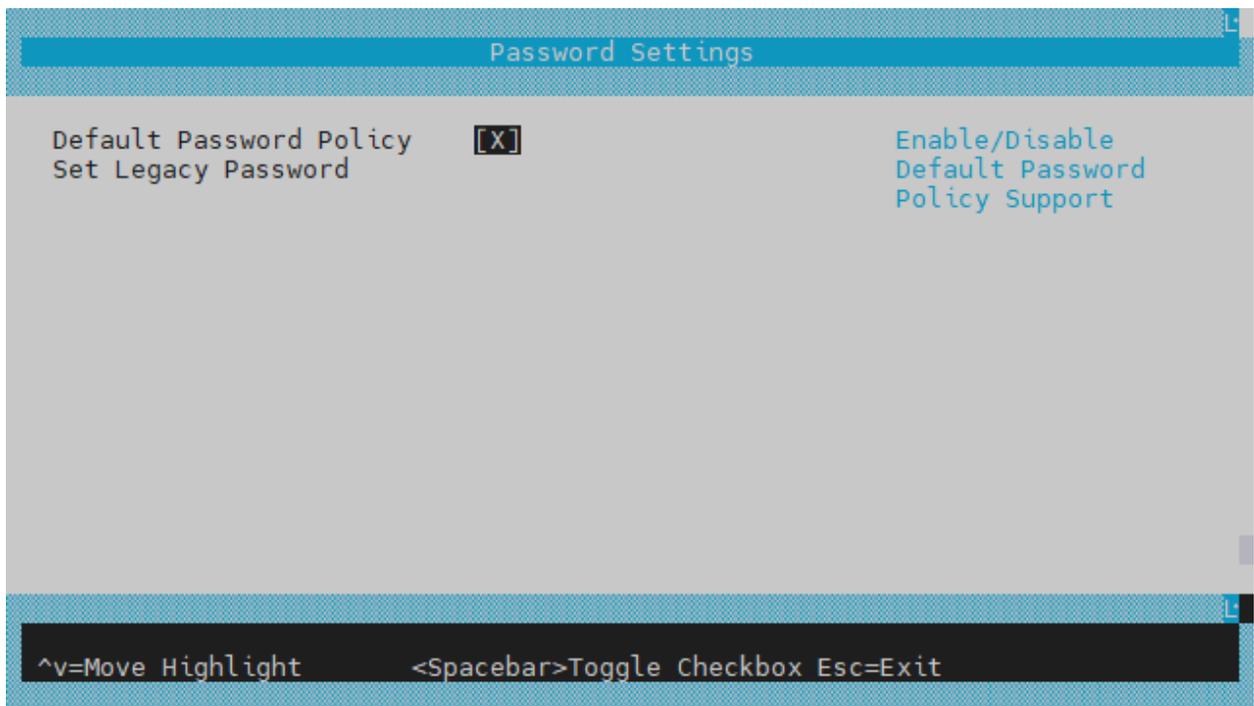
The user can enable/disable the UEFI password policy. The default password policy is enabled by default using a checkbox in the UEFI menu.

The user can browse the UEFI menu and disable as follows:

1. Navigate to "Device Configuration" > "System Configuration" > "Password Settings":



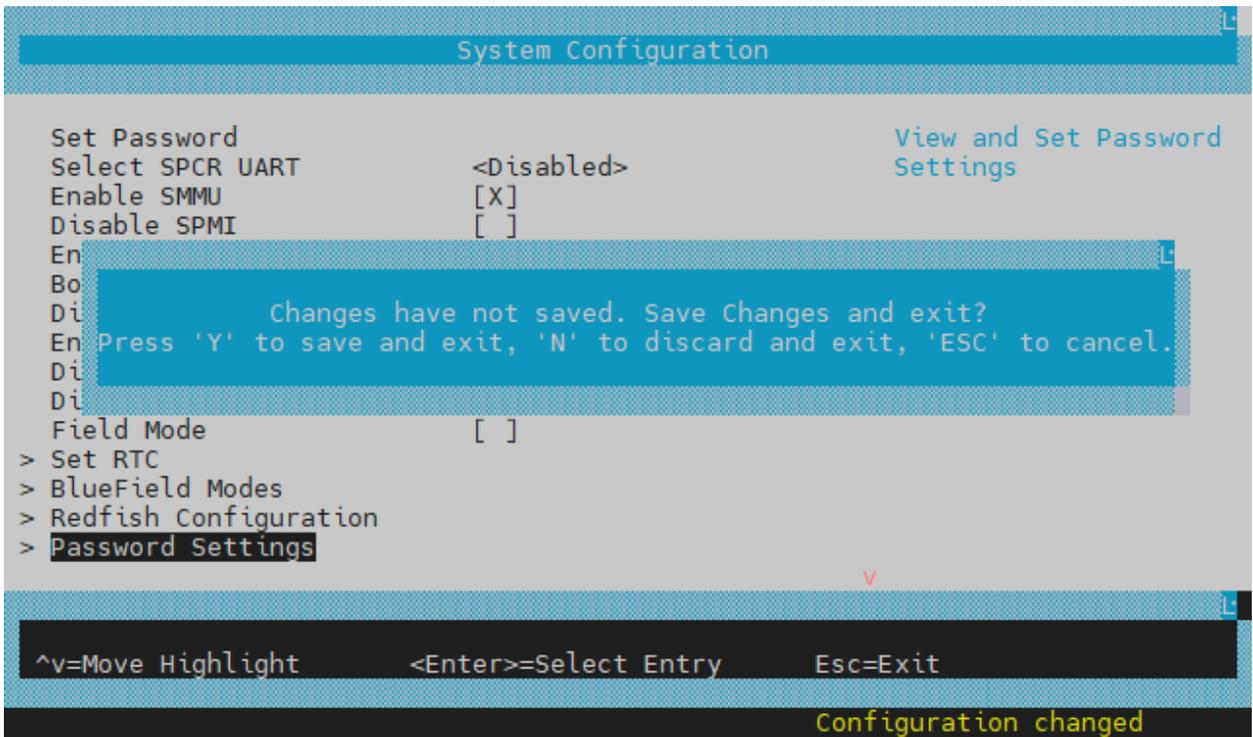
2. The "Default Password Policy" checkbox controls whether the more secure password policy is enabled:



i Info

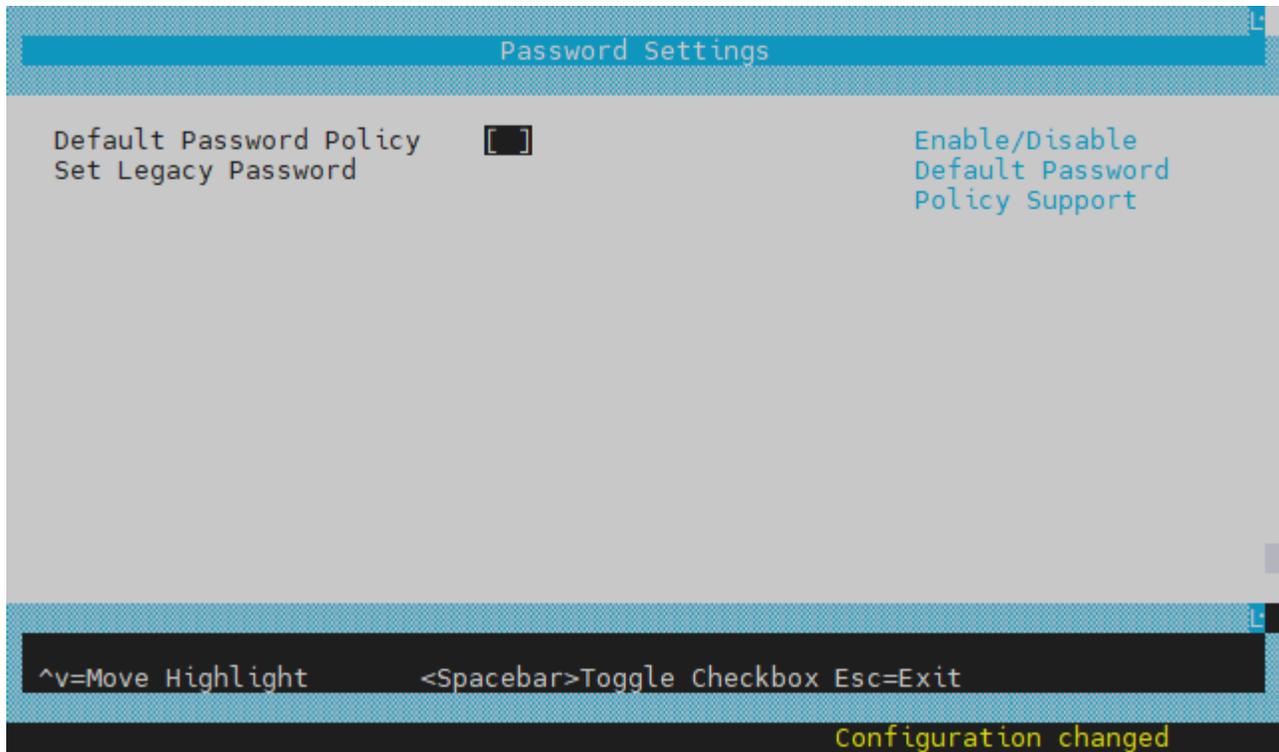
To disable the Default Password Policy, hit the spacebar to clear the checkbox.

3. The user must hit ESC ESC and answer "Y" to save the configuration change.



Disabling Default Password Policy

To disable the Default Password Policy, hit the spacebar to clear the checkbox.



Info

If the Default Password Policy is disabled, the password entered must be between 1 and 64 characters.

Software Downgrade

The UEFI's password policy is not backward compatible. Although downgrade is not recommended, users are allowed to downgrade their software while their password is set. But , if and only if the password is set, users must configure the legacy password prior to performing any downgrade.

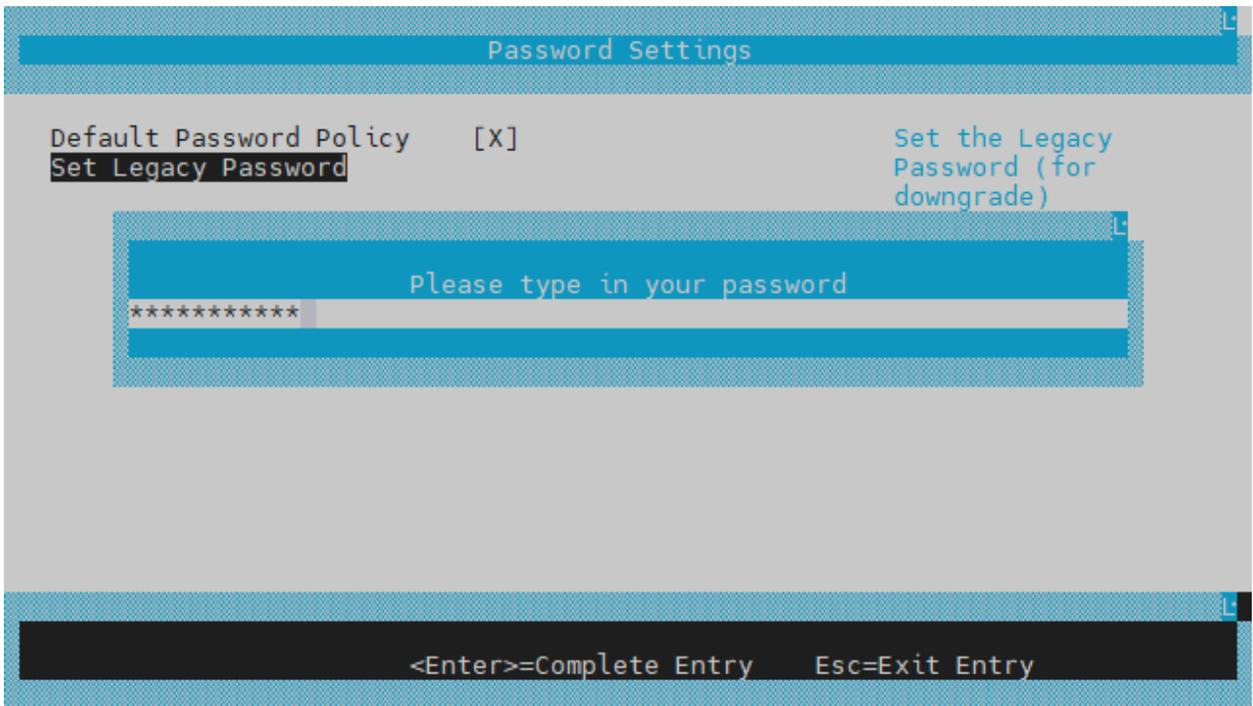
For BSP 4.6.0 (DOCA 2.6.0) or higher, users must change the UEFI password saved to the older "Legacy" format.

Warning

If this procedure is not followed before performing a software downgrade, users would not be able to enter the UEFI menu.

In the UEFI menu:

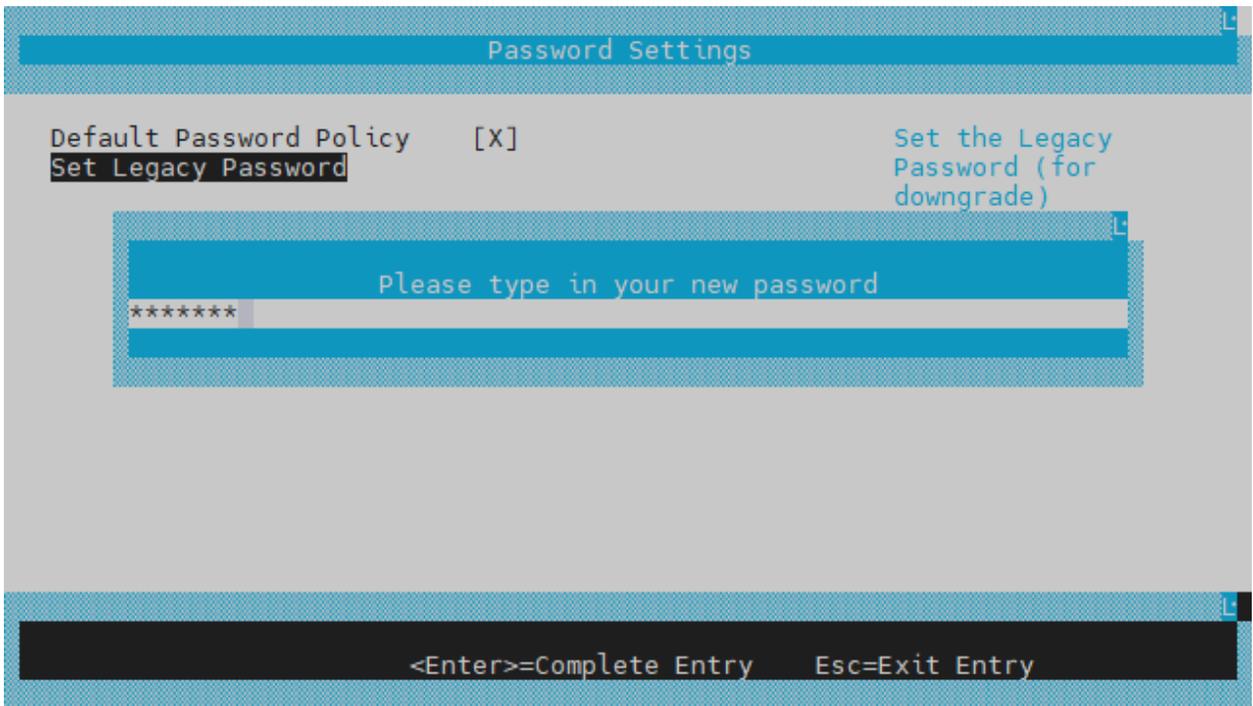
1. Navigate to "Device Manager" > "System Configuration" > "Password Settings" > " Set Legacy Password".
2. Select " Set Legacy Password ".
3. Enter your current password:



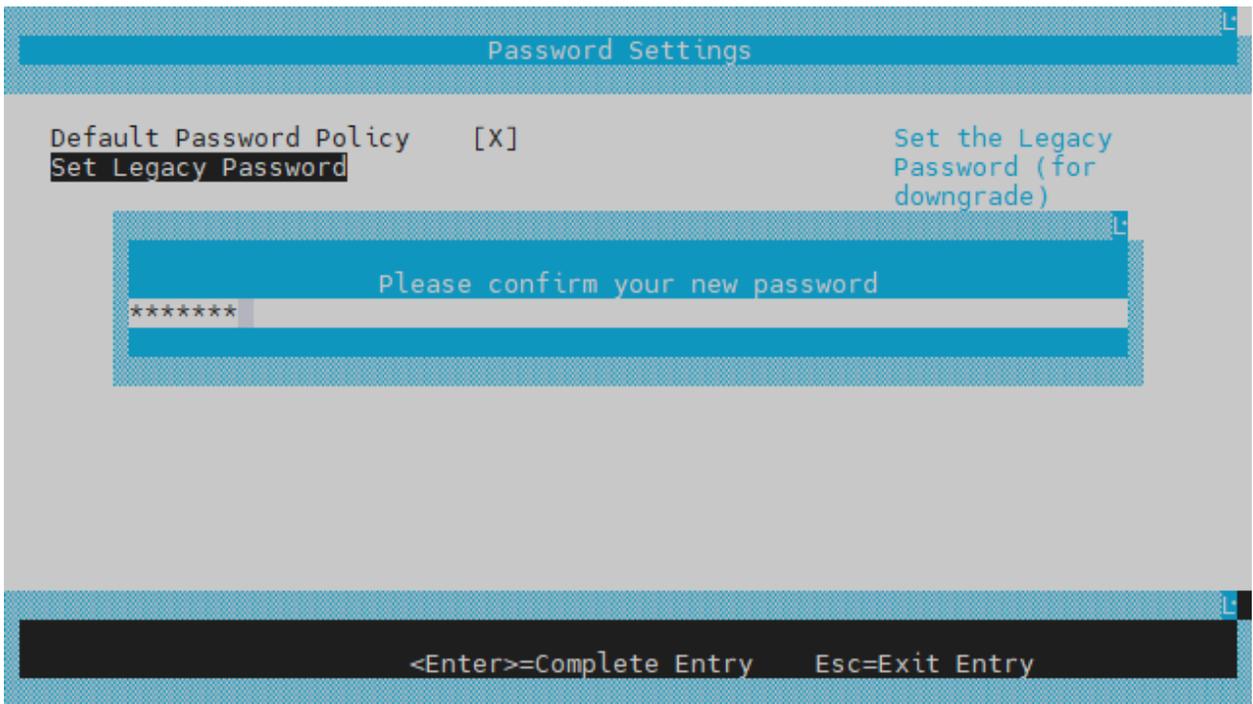
4. Type in a new legacy password between 1 and 20 characters:

(i) Note

The password format allows up to 64 characters but anything greater than 20 characters is not backward compatible.



5. Confirm the new password:



Now, you may downgrade your BlueField image.

Password Reset

To reset the UEFI menu password, users may use the ready to use capsule file `EnrollKeysCap` installed under `/lib/firmware/mellanox/boot/capsule/EnrollKeysCap` on the BlueField DPU file system. From the BlueField console, execute the following command, then reboot:

```
ubuntu@localhost:~$ bfrec --  
capsule /lib/firmware/mellanox/boot/capsule/EnrollKeysCap
```

On the next reboot, the capsule file is processed, and the UEFI password is reset to `bluefield`.

GRUB Password

GRUB menu entries are protected by a username and password to prevent unwanted changes to the default boot options or parameters.

The default credentials are as follows:

Username	<code>admin</code>
Password	<code>BlueField</code>

The password can be changed during BFB installation by providing a new `grub_admin_PASSWORD` parameter in `bf.cfg`:

```
# vim bf.cfg  
grub_admin_PASSWORD='  
grub.pbkdf2.sha512.10000.5EB1FF92FDD89BDAF3395174282C77430656A6DBE0
```

To get a new encrypted password value use the command `grub-mkpasswd-pbkdf2`.

After the installation, the password can be updated by editing the file `/etc/grub.d/40_custom` and then running the command `update-grub` which

updates the file `/boot/grub/grub.cfg`.

Ubuntu Password Policy

Upon first login, the username `ubuntu` must enter the default password `ubuntu` if this was not changed during the OS installation process. Users are then required to change the default password according to the following password policy:

The following table details the password policy parameters:

Info

Each of these parameters is configurable in its respective config file indicated in the "Config File Path" column.

Config File Path	Parameter	Value	Description
<code>/etc/security/pwquality.conf</code>	<code>minlen</code>	12	Minimum password length
<code>/etc/pam.d/common-password</code>	<code>remember</code>	3	The number of previous passwords which cannot be reused
<code>/etc/security/faillock.conf</code>	<code>silent</code>	Uncommented	Prevents printing informative messages to the user
	<code>deny</code>	10	The number of authentication attempts permitted before the user is locked out

Config File Path	Parameter	Value	Description
	<code>unlock_time</code>	600	The duration of the lockout period, in seconds

Notice

This document is provided for information purposes only and shall not be regarded as a warranty of a certain functionality, condition, or quality of a product. NVIDIA Corporation ("NVIDIA") makes no representations or warranties, expressed or implied, as to the accuracy or completeness of the information contained in this document and assumes no responsibility for any errors contained herein. NVIDIA shall have no liability for the consequences or use of such information or for any infringement of patents or other rights of third parties that may result from its use. This document is not a commitment to develop, release, or deliver any Material (defined below), code, or functionality.

NVIDIA reserves the right to make corrections, modifications, enhancements, improvements, and any other changes to this document, at any time without notice.

Customer should obtain the latest relevant information before placing orders and should verify that such information is current and complete.

NVIDIA products are sold subject to the NVIDIA standard terms and conditions of sale supplied at the time of order acknowledgement, unless otherwise agreed in an individual sales agreement signed by authorized representatives of NVIDIA and customer ("Terms of Sale"). NVIDIA hereby expressly objects to applying any customer general terms and conditions with regards to the purchase of the NVIDIA product referenced in this document. No contractual obligations are formed either directly or indirectly by this document.

NVIDIA products are not designed, authorized, or warranted to be suitable for use in medical, military, aircraft, space, or life support equipment, nor in applications where failure or malfunction of the NVIDIA product can reasonably be expected to result in personal injury, death, or property or environmental damage. NVIDIA accepts no liability for inclusion and/or use of NVIDIA products in such equipment or applications and therefore such inclusion and/or use is at customer's own risk.

NVIDIA makes no representation or warranty that products based on this document will be suitable for any specified use. Testing of all parameters of each product is not necessarily performed by NVIDIA. It is customer's sole responsibility to evaluate and determine the applicability of any information contained in this document, ensure the product is suitable and fit for the application planned by customer, and perform the necessary testing for the application in order to avoid a default of the application or the product. Weaknesses in customer's product designs may affect the quality and reliability of the NVIDIA product and may result in additional or different conditions and/or requirements beyond those contained in this document. NVIDIA accepts no liability related to any default, damage, costs, or problem which may be based on or attributable to: (i) the use of the NVIDIA product in any manner that is contrary to this document or (ii) customer product designs.

No license, either expressed or implied, is granted under any NVIDIA patent right, copyright, or other NVIDIA intellectual property right under this document. Information published by NVIDIA regarding third-party products or services does not constitute a license from NVIDIA to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property rights of the third party, or a license from NVIDIA under the patents or other intellectual property rights of NVIDIA.

Reproduction of information in this document is permissible only if approved in advance by NVIDIA in writing, reproduced without alteration and in full compliance with all applicable export laws and regulations, and accompanied by all associated conditions, limitations, and notices.

THIS DOCUMENT AND ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL NVIDIA BE LIABLE FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF

ANY USE OF THIS DOCUMENT, EVEN IF NVIDIA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Notwithstanding any damages that customer might incur for any reason whatsoever, NVIDIA's aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms of Sale for the product.

Trademarks

NVIDIA and the NVIDIA logo are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Other company and product names may be trademarks of the respective companies with which they are associated.

© Copyright 2025, NVIDIA. PDF Generated on 12/15/2025