



Configure default Windows user to UNIX user mappings on the SMB server

ONTAP 9

NetApp
June 08, 2023

Table of Contents

- Configure default Windows user to UNIX user mappings on the SMB server 1
 - Configure the default UNIX user 1
 - Configure the guest UNIX user 2
 - Map the administrators group to root 3

Configure default Windows user to UNIX user mappings on the SMB server

Configure the default UNIX user

You can configure the default UNIX user to use if all other mapping attempts fail for a user, or if you do not want to map individual users between UNIX and Windows. Alternatively, if you want authentication of non-mapped users to fail, you should not configure the default UNIX user.

About this task

By default, the name of the default UNIX user is “pcuser”, which means that, by default, user mapping to the default UNIX user is enabled. You can specify another name to use as the default UNIX user. The name that you specify must exist in the name service databases configured for the storage virtual machine (SVM). If this option is set to a null string, no one can access the CIFS server as a UNIX default user. That is, each user must have an account in the password database before they can access the CIFS server.

For a user to connect to the CIFS server using the default UNIX user account, the user must meet the following prerequisites:

- The user is authenticated.
- The user is in the CIFS server’s local Windows user database, in the CIFS server's home domain, or in a trusted domain (if multidomain name mapping searches is enabled on the CIFS server).
- The user name is not explicitly mapped to a null string.

Steps

1. Configure the default UNIX user:

| If you want to ... | Enter ... |
|---|--|
| Use the default UNIX user “pcuser” | <code>vserver cifs options modify -default -unix-user pcuser</code> |
| Use another UNIX user account as the default user | <code>vserver cifs options modify -default -unix-user user_name</code> |
| Disable the default UNIX user | <code>vserver cifs options modify -default -unix-user ""</code> |

```
vserver cifs options modify -default-unix-user pcuser
```

2. Verify that the default UNIX user is configured correctly: `vserver cifs options show -vserver vserver_name`

In the following example, both the default UNIX user and the guest UNIX user on SVM vs1 are configured to use UNIX user “pcuser”:

```
vserver cifs options show -vserver vs1
```

```
Vserver: vs1

Client Session Timeout : 900
Default Unix Group      : -
Default Unix User       : pcuser
Guest Unix User         : pcuser
Read Grants Exec        : disabled
Read Only Delete        : disabled
WINS Servers            : -
```

Configure the guest UNIX user

Configuring the guest UNIX user option means that users who log in from untrusted domains are mapped to the guest UNIX user and can connect to the CIFS server. Alternatively, if you want authentication of users from untrusted domains to fail, you should not configure the guest UNIX user. The default is to not allow users from untrusted domains to connect to the CIFS server (the guest UNIX account is not configured).

About this task

You should keep the following in mind when configuring the guest UNIX account:

- If the CIFS server cannot authenticate the user against a domain controller for the home domain or a trusted domain or the local database and this option is enabled, the CIFS server considers the user as a guest user and maps the user to the specified UNIX user.
- If this option is set to a null string, the guest UNIX user is disabled.
- You must create a UNIX user to use as the guest UNIX user in one of the storage virtual machine (SVM) name service databases.
- A user logged in as a guest user is automatically a member of the BUILTIN\guests group on the CIFS server.
- The 'homedirs-public' option applies only to authenticated users. A user logged in as a guest user does not have a home directory and cannot access other users' home directories.

Steps

1. Perform one of the following actions:

| If you want to... | Enter... |
|-------------------------------|---|
| Configure the guest UNIX user | <pre>vserver cifs options modify -guest -unix-user <i>unix_name</i></pre> |
| Disable the guest UNIX user | <pre>vserver cifs options modify -guest -unix-user ""</pre> |

```
vserver cifs options modify -guest-unix-user pcuser
```

2. Verify that the guest UNIX user is configured correctly: `vserver cifs options show -vserver vserver_name`

In the following example, both the default UNIX user and the guest UNIX user on SVM vs1 are configured to use UNIX user “pcuser”:

```
vserver cifs options show -vserver vs1
```

```
Vserver: vs1

Client Session Timeout : 900
Default Unix Group      : -
Default Unix User       : pcuser
Guest Unix User         : pcuser
Read Grants Exec        : disabled
Read Only Delete        : disabled
WINS Servers            : -
```

Map the administrators group to root

If you have only CIFS clients in your environment and your storage virtual machine (SVM) was set up as a multiprotocol storage system, you must have at least one Windows account that has root privilege for accessing files on the SVM; otherwise, you cannot manage the SVM because you do not have sufficient user rights.

About this task

If your storage system was set up as NTFS-only, however, the `/etc` directory has a file-level ACL that enables the administrators group to access the ONTAP configuration files.

Steps

1. Set the privilege level to advanced: `set -privilege advanced`
2. Configure the CIFS server option that maps the administrators group to root as appropriate:

| If you want to... | Then... |
|---|---|
| Map the administrator group members to root | <pre>vserver cifs options modify -vserver vserver_name -is-admin-users-mapped-to -root-enabled true</pre> All accounts in the administrators group are considered root, even if you do not have an <code>/etc/usermap.cfg</code> entry mapping the accounts to root. If you create a file using an account that belongs to the administrators group, the file is owned by root when you view the file from a UNIX client. |

| If you want to... | Then... |
|--|---|
| Disable mapping the administrators group members to root | <pre>vserver cifs options modify -vserver vserver_name -is-admin-users-mapped-to -root-enabled false</pre> Accounts in the administrators group no longer map to root. You can only explicitly map a single user to root. |

3. Verify that the option is set to the desired value: `vserver cifs options show -vserver vserver_name`
4. Return to the admin privilege level: `set -privilege admin`

Copyright information

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.