



## **vserver name-mapping commands**

### **ONTAP 9.3 commands**

NetApp

February 12, 2024

# Table of Contents

- vserver name-mapping commands ..... 1
  - vserver name-mapping create ..... 1
  - vserver name-mapping delete ..... 2
  - vserver name-mapping insert ..... 3
  - vserver name-mapping modify ..... 4
  - vserver name-mapping refresh-hostname-ip ..... 5
  - vserver name-mapping show ..... 6
  - vserver name-mapping swap ..... 8

# vserver name-mapping commands

## vserver name-mapping create

Create a name mapping

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `vserver name-mapping create` command creates a name mapping. Name mappings are applied in the order in which they occur in the priority list; for example, a name mapping that occurs at position 2 in the priority list is applied before a name mapping that occurs at position 3. Each mapping direction (Kerberos-to-UNIX, Windows-to-UNIX, and UNIX-to-Windows) has its own priority list. Data ONTAP prevents you from creating two name mappings with the same pattern.

Patterns can be expressed as POSIX regular expressions. For information about regular expressions, see the UNIX reference page for *regex(7)*.

Each Vserver can have up to 1024 name mappings in each direction.



If you are using the CLI, you must delimit all regular expressions with double quotation marks (""). For instance, to enter the regular expression `(.)_` in the CLI, type `"(.)" at the command prompt. To add a "?" to the expression, press ESC followed by the "?".`

### Parameters

**-vserver <vserver name> - Vserver**

This parameter specifies the Vserver on which you want to create the name mapping.

**-direction {krb-unix|win-unix|unix-win} - Direction**

This parameter specifies the direction of the name mapping. Possible values are *krb-unix* for a Kerberos-to-UNIX name mapping, *win-unix* for a Windows-to-UNIX name mapping, and *unix-win* for a UNIX-to-Windows name mapping.

**-position <integer> - Position**

This parameter specifies the name mapping's position in the priority list. Specify the position as a positive integer.



If you want to create a new name mapping at a position that is already occupied in the priority list, use the [vserver name-mapping insert](#) command instead of the `vserver name-mapping create` command.

**-pattern <text> - Pattern**

This parameter specifies the pattern you want to match. Refer to the command description section for details. The pattern can be up to 256 characters in length.

**-replacement <text> - Replacement**

This parameter specifies the replacement pattern. The replacement pattern can be up to 256 characters in

length.

#### **{ [-address <IP Address/Mask>] - IP Address with Subnet Mask**

This optional parameter specifies the IP address that can be used to match the client's workstation IP address with the pattern.

#### **| [-hostname <text>] - Hostname }**

This optional parameter specifies the hostname that can be used to match the corresponding client's workstation IP address with the list of IP addresses with the pattern.

## **Examples**

The following example creates a name mapping on a Vserver named vs1. The mapping is from UNIX to Windows at position 5 in the priority list. The mapping maps the pattern cifs to the replacement EXAMPLE\Domain Users.

```
cluster1::> vsriver name-mapping create -vsriver vs1 -direction unix-win
-position 5 -pattern cifs -replacement "EXAMPLE\\Domain Users -address
10.238.33.245/24"
cluster1::> vsriver name-mapping create -vsriver vs1 -direction unix-win
-position 5 -pattern cifs -replacement "EXAMPLE\\Domain Users -hostname
google.com"
```

## **Related Links**

- [vsriver name-mapping insert](#)

## **vsriver name-mapping delete**

Delete a name mapping

**Availability:** This command is available to *cluster* and *Vsriver* administrators at the *admin* privilege level.

## **Description**

The `vsriver name-mapping delete` command deletes a name mapping.

## **Parameters**

### **-vsriver <vsriver name> - Vsriver**

This parameter specifies the Vsriver from which you want to delete the name mapping.

### **-direction {krb-unix|win-unix|unix-win} - Direction**

This parameter specifies the direction of the name mapping that you want to delete.

### **-position <integer> - Position**

This parameter specifies the position of the name mapping that you want to delete. Specify the position as a positive integer.

## Examples

The following example deletes a name mapping on a Vserver named vs1. The name mapping is from UNIX to Windows and is at position 5.

```
cluster1::> vsriver name-mapping delete -vserver vs1 -direction unix-win  
-position 5
```

## vserver name-mapping insert

Create a name mapping at a specified position

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `vserver name-mapping insert` command creates a name mapping at a specified position in the priority list. The command rearranges the list as needed to accommodate the new entry. For instance, if you have a priority list of five mappings and insert a new mapping at position 3, the mapping previously at position 3 is moved to position 4, the mapping previously at position 4 is moved to position 5, and the mapping previously at position 5 is moved to position 6. Each mapping direction (Kerberos-to-UNIX, Windows-to-UNIX, and UNIX-to-Windows) has its own priority list.

You can specify patterns as POSIX regular expressions. For information about regular expressions, see the UNIX reference page for *regex (7)*.

Each Vserver can have up to 1024 name mappings in each direction.



If you are using the CLI, you must delimit all regular expressions with double quotation marks (""). For instance, to enter the regular expression `(.)_`` in the CLI, type ``"(.)" at the command prompt. To add a "?" to the expression, press ESC followed by the "?".`

### Parameters

**-vserver <vserver name> - Vserver**

This parameter specifies the Vserver on which you want to create the name mapping.

**-direction {krb-unix|win-unix|unix-win} - Direction**

This parameter specifies the direction of the name mapping. Possible values are *krb-unix* for a Kerberos-to-UNIX name mapping, *win-unix* for a Windows-to-UNIX name mapping, and *unix-win* for a UNIX-to-Windows name mapping.

**-position <integer> - Position**

This parameter specifies the position in the priority list at which you want to insert the new name mapping. Specify a position as a positive integer.

**-pattern <text> - Pattern**

This parameter specifies the pattern you want to match. Refer to the command description section for details. The pattern can be up to 256 characters in length.

### **-replacement <text> - Replacement**

This parameter specifies the replacement pattern. The replacement pattern can be up to 256 characters in length.

### **{ [-address <IP Address/Mask>] - IP Address with Subnet Mask**

This optional parameter specifies the IP address that can be used to match the client's workstation IP address with the pattern.

### **| [-hostname <text>] - Hostname }**

This optional parameter specifies the hostname that can be used to match the corresponding client's workstation IP address with the list of IP addresses with the pattern.

## **Examples**

The following example creates a name mapping on a Vserver named vs1. It is a user mapping from Kerberos to UNIX. It is inserted into the priority list at position 2. The name mapping maps any principal in the Kerberos realm SEC.EXAMPLE.COM to the UNIX user name corresponding to the principal's base name with any instance names removed; for example, tom/admin@SEC.EXAMPLE.COM is mapped to tom.

```
cluster1::> vsriver name-mapping insert -vserver vs1 -direction krb-unix
-position 2 -pattern "([^\@/]+)(/[^\@]+)?@SEC.EXAMPLE.COM" -replacement "\1"
cluster1::> vsriver name-mapping insert -vserver vs1 -direction krb-
unix -position 3 -pattern
"([^\@/]+)(/[^\@]+)?@SEC.EXAMPLE.COM" -replacement "\1 -address
10.238.33.245/24
```

## **vserver name-mapping modify**

Modify a name mapping's pattern, replacement pattern, or both

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### **Description**

The `vserver name-mapping modify` command modifies the pattern, the replacement pattern, or both of a specified name mapping.

You can specify patterns as POSIX regular expressions. For information about regular expressions, see the UNIX reference page for `regex(7)`.

Each Vserver can have up to 1024 name mappings in each direction.



If you are using the CLI, you must delimit all regular expressions with double quotation marks ("). For instance, to enter the regular expression (.) in the CLI, type "(.)" at the command prompt. To add a "?" to the expression, press ESC followed by the "?".

## Parameters

### **-vserver <vserver name> - Vserver**

This parameter specifies the Vserver on which you want to modify the name mapping.

### **-direction {krb-unix|win-unix|unix-win} - Direction**

This parameter specifies the direction of the name mapping. Possible values are *krb-unix* for a Kerberos-to-UNIX name mapping, *win-unix* for a Windows-to-UNIX name mapping, and *unix-win* for a UNIX-to-Windows name mapping.

### **-position <integer> - Position**

This parameter specifies the name mapping's position in the priority list. A position is specified as a positive integer. Each mapping direction (Kerberos-to-UNIX, Windows-to-UNIX, and UNIX-to-Windows) has its own priority list.

### **[-pattern <text>] - Pattern**

This parameter specifies the pattern you want to match. Refer to the command description section for details. The pattern can be up to 256 characters in length.

### **[-replacement <text>] - Replacement**

This parameter specifies the replacement pattern. The replacement pattern can be up to 256 characters in length.

### **{ [-address <IP Address/Mask>] - IP Address with Subnet Mask**

This optional parameter specifies the IP address that can be used to match the client's workstation IP address with the pattern.

### **| [-hostname <text>] - Hostname }**

This optional parameter specifies the hostname that can be used to match the corresponding client's workstation IP address with the list of IP addresses with the pattern.

## Examples

The following example modifies the name mapping on the Vserver named vs1 and direction win-unix, at position 3. The pattern to be matched is changed to "EXAMPLE\(.+)".

```
cluster1::> vsriver name-mapping modify -vserver vs1 -direction win-unix
-position 3 -pattern "EXAMPLE\(.+)" -address 10.238.2.54/32"
cluster1::> vsriver name-mapping modify -vserver vs1 -direction win-unix
-position 3 -pattern "EXAMPLE\(.+)" -hostname google.com"
```

## vserver name-mapping refresh-hostname-ip

Refresh the IP addresses for configured hostnames

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

## Description

The `vserver name-mapping refresh-hostname-ip` command will refresh the IP Address entries in the name-mapping configuration by resolving the hostname. If you run this command with no parameters, this will refresh the IP address entries for every hostname in the name-mapping configuration.

## Parameters

**-vserver <vserver> - Vserver (privilege: advanced)**

This parameter specifies the Vserver for which the hostname lookup needs to be done.

**[-direction {krb-unix|win-unix|unix-win}] - Name Mapping Direction (privilege: advanced)**

This optional parameter specifies the direction of the name-mapping entry for the hostname lookup.

**[-hostname <text>] - Hostname (privilege: advanced)**

This optional parameter specifies the hostname for which the lookup needs to be done.

## Examples

```
cluster1::*> vserver name-mapping refresh-hostname-ip -vserver vs1
-direction win-unix -hostname
```

## vserver name-mapping show

Display name mappings

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

## Description

The `vserver name-mapping show` command displays information about name mappings. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all name mappings:

- Vserver name
- Direction of the mapping (krb-unix for Kerberos-to-UNIX, win-unix for Windows-to-UNIX, or unix-win for UNIX-to-Windows)
- Position of the mapping in the priority list
- Pattern to be matched
- Replacement pattern

You can specify additional parameters to display only information that matches those parameters. For instance, to display information only about Kerberos-to-UNIX name mappings, run the command with the `-direction krb-unix` parameter.



## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>`, ... parameter, the command output also includes the specified field or fields. You can use `-fields ?` to display the fields to specify.

**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-vserver <vserver name>] - Vserver**

If you specify this parameter, the command displays information only about the name mapping or mappings that match the specified Vserver.

**[-direction {krb-unix|win-unix|unix-win}] - Direction**

If you specify this parameter, the command displays information only about the name mapping or mappings that have the specified mapping direction.

**[-position <integer>] - Position**

If you specify this parameter, the command displays information only about the name mapping that has the specified position in the priority list.

**[-pattern <text>] - Pattern**

If you specify this parameter, the command displays information only about the name mapping or mappings that use the specified matching pattern. The pattern can be up to 256 characters in length. Refer to the command description section for details.

**[-replacement <text>] - Replacement**

If you specify this parameter, the command displays information only about the name mapping or mappings that use the specified replacement pattern.

**[-address <IP Address/Mask>] - IP Address with Subnet Mask**

If you specify this parameter, the command displays information only about the name mapping or mappings that use the specified IP address.

**[-hostname <text>] - Hostname**

If you specify this parameter, the command displays information only about the name mapping or mappings that use the specified hostname.

## Examples

The following example displays information about all name mappings:

```
cluster1::> vsriver name-mapping show
Vserver:    vs1
Direction:  win-unix
Position Hostname          IP Address/Mask
-----
1          google.com      -                Pattern:
EXAMPLE\\administrator
Replacement: nobody
2          -                10.238.2.34/32   Pattern: EXAMPLE\\(.+)
Replacement: \_1
```

## vsriver name-mapping swap

Exchange the positions of two name mappings

**Availability:** This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

### Description

The `vsriver name-mapping swap` command exchanges the positions of two name mappings in the priority list.

### Parameters

**-vsriver <vsriver name> - Vserver**

This parameter specifies the Vserver on which the name mappings are located.

**-direction {krb-unix|win-unix|unix-win} - Direction**

This parameter specifies the direction of the name mappings that you want to exchange. Each mapping direction (Kerberos-to-UNIX, Windows-to-UNIX, and UNIX-to-Windows) has its own priority list.

**-position <integer> - Position**

This parameter specifies the position in the priority list of the first name mapping that you want to exchange. Specify a position as a positive integer.

**-with-position <integer> - Position of an existing name mapping entry in the list of name mappings for this Vserver. This entry will be swapped with the entry at 'position'.**

This parameter specifies the position in the priority list of the second name mapping that you want to exchange. Specify a position as a positive integer.

### Examples

The following example exchanges the positions of two name mappings on a Vserver named `vs1`. The name mappings have the direction Windows-to-UNIX. The name mappings are exchanged between positions 2 and 4.

```
cluster1::> vserver name-mapping swap -vserver vs1 -direction win-unix  
-position 2 -with-position 4
```

## Copyright information

Copyright © 2024 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.