



Automatic detection of host entities

Snapdrive for Unix

Ivana Devine
January 21, 2021

Table of Contents

Automatic detection of host entities 1

Automatic detection of host entities

SnapDrive for UNIX automatically detects the configuration of the host entity for some commands. A few `snap storage` commands need only the name of the host entity. In these cases, you do not have to specify the type of the host entity.

The following commands are enabled for automatic detection:

- `storage delete`
- `storage resize`
- `snap create`
- `snap restore`
- `snap connect`
- `snap list`

When the host entity exists, SnapDrive for UNIX automatically detects the type of the host entity. In this case, you need to provide only the name of the host entity; you do not have to specify the type. The SnapDrive `snap` commands and some `storage` commands also need only the name of the host entity; you do not have to specify the type.

Automatic detection of commands takes extra time for SnapDrive 4.1 and later because it collects the details of all the storage resources. If you want a faster response, specify the file specification with the SnapDrive for UNIX commands.

You can enable automatic detection for the storage delete operation by running the `snapdrive storage delete` command.

Example 1:

```
snapdrive storage delete host_dg my_fs -full
```

In the example, `host_dg` and `my_fs` are automatically detected.

Example 2:

```
snapdrive storage delete mydg -fs myfs -full
```

In the example, the `mydg` disk group is automatically detected.

You can enable automatic detection for the storage resize operation by running the `snapdrive storage resize` command.

For example:

```
[root@lnx197-132 ~]# snapdrive storage resize mydg23 -addlun -growby 10m
Auto detecting the type of filespec 'mydg23' in progress ... detected as
disk group
    discovering filer LUNs in disk group mydg23...done
    LUN bart:/vol/voldm/mydg23-1_SdLun ... created

    mapping new lun(s) ... done
    discovering new lun(s) ... done.
    initializing LUN(s) and adding to disk group mydg23...done
Disk group mydg23 has been resized
```

You can enable the automatic detection for the snap create operation by running the `snapdrive snap create` command.

For example:

```
root@lnx197-132 ~]# snapdrive snap create mydg22 mydg23 /mnt/mnt12
-snapname new_snap
Auto detecting the type of filespec 'mydg22' in progress ... detected as
disk group
Auto detecting the type of filespec 'mydg23' in progress ... detected as
disk group
Auto detecting the type of filespec '/mnt/mnt12 ' in progress ... detected
as file system

Starting snap create /dev/mapper/mydg22, /dev/mapper/mydg23, /mnt/mnt12
WARNING: DO NOT CONTROL-C!
    If snap create is interrupted, incomplete snapdrive
        generated data may remain on the filer volume(s)
        which may interfere with other snap operations.
Successfully created snapshot new_snap on bart:/vol/voldm

    snapshot new_snap contains:
    disk group mydg22
    disk group mydg23
    disk group dg121 containing host volumes
        lv121 (filesystem: /mnt/mnt12)
```

You can enable automatic detection for the snap connect operation by running the `snapdrive snap connect` command.

For example:

```
[root@lnx197-132 ~]# snapdrive snap connect mydg22 xxx mydg23 yyy
-snapname bart:/vol/voldm:snap_1
Auto detecting the type of filespec 'mydg22' in progress ... detected as
disk group
Auto detecting the type of filespec 'xxx' in progress ...
    xxx does not exist - Taking xxx as a destination to fspec
mydg22Auto detecting the type of filespec 'mydg23' in progress ...
detected as disk group
Auto detecting the type of filespec 'yyy' in progress ...
    yyy does not exist - Taking yyy as a destination to fspec mydg23
connecting mydg22:
    LUN copy mydg22_SdLun_0 ... created
        (original: bart:/vol/voldm/mydg22_SdLun)

    mapping new lun(s) ... done

connecting mydg23:
    LUN copy mydg23_SdLun_1 ... created
        (original: bart:/vol/voldm/mydg23_SdLun)

    mapping new lun(s) ... done
    discovering new lun(s) ... done
    Importing xxx, yyy
Successfully connected to snapshot bart:/vol/voldm:snap_1
    disk group xxx
    disk group yyy
```

You can enable the automatic detection for the snap restore operation by running the `snapdrive snap restore` command.

For example:

```
snapdrive snap restore bart:/vol/voldm/lun44 /mnt/fs3 fs5_SdDg/fs5_SdHv
fs4_SdDg -snapname bart:/vol/voldm:toi_snap
```

```
Auto detection of file_spec(s) in progress ...
```

- 'bart:/vol/voldm/lun44' detected as LUN.
- '/mnt/fs3' detected as file system.
- 'fs5_SdDg/fs5_SdHv' detected as logical volume.
- 'fs4_SdDg' detected as disk group.

```
Starting to restore /dev/mapper/fs4_SdDg, /mnt/fs3,
/dev/mapper/fs5_SdDg-fs5_SdHv, bart:/vol/voldm/lun44
```

```
WARNING: This can take several minutes.
```

```
DO NOT CONTROL-C!
```

```
If snap restore is interrupted, the filespecs
being restored may have inconsistent or corrupted
data.
```

```
For detailed progress information, see the log file /var/log/sd-
recovery.log
```

```
Importing fs4_SdDg, fs3_SdDg, fs5_SdDg
```

```
Successfully restored snapshot toi_snap on bart:/vol/voldm
```

```
disk group fs4_SdDg containing host volumes
```

```
fs4_SdHv (filesystem: /mnt/fs4)
```

```
disk group fs3_SdDg containing host volumes
```

```
fs3_SdHv (filesystem: /mnt/fs3)
```

```
disk group fs5_SdDg containing host volumes
```

```
fs5_SdHv (filesystem: /mnt/fs5)
```

```
raw LUN: bart:/vol/voldm/lun44
```

SnapDrive does not support automatic detection for snap connect and snap restore operations for incorrect file specification.

You can enable automatic detection for the snap list operation by running the `snapdrive snap list` command.

For example:

```
root@lnx197-132 ~]# snapdrive snap list -snapname bart:/vol/voldm:snap_1
```

```
snap name          host          date
snapped
-----
```

```
-----
bart:/vol/voldm:snap_1          lnx197-132.xyz.com Apr  9 06:04 mydg22
mydg23 dg121
```

```
[root@lnx197-132 ~]# snapdrive snap list mydg23
```

```
Auto detecting the type of filespec 'mydg23' in progress ... detected as
disk group
```

```
snap name          host          date
snapped
-----
```

```
-----
bart:/vol/voldm:snap_1          lnx197-132.xyz.com Apr  9 06:04 mydg22
mydg23 dg121
```

```
bart:/vol/voldm:all            lnx197-132.xyz.com Apr  9 00:16
```

```
mydg22 mydg23 fs1_SdDg
```

```
bart:/vol/voldm:you            lnx197-132.xyz.com Apr  8 21:03
```

```
mydg22 mydg23
```

```
bart:/vol/voldm:snap_2          lnx197-132.xyz.com Apr  8 18:05
```

```
mydg22 mydg23
```

Copyright Information

Copyright © 2021 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.