

## Kann der NetWorker einen Bootstrap zurücklesen, der sich auf mehreren Medien befindet ?

Normalerweise ist der Bootstrap so klein, daß er auf nur einem Medium zu finden sein wird. Was aber passiert, wenn er tatsächlich auf einem weiteren Medium fortgeschrieben werden muß?

Dies ist mit den kleinen Testsystemen, mit denen ich normalerweise arbeite, gar nicht so einfach zu simulieren. Aber nach einiger Zeit hat es dann doch geklappt, wie der Report zeigt:

```
Z:\NSR\BIN>mminfo -q "Name=bootstrap" -r "volume,savetime(17),sumsize,ssid, //
sumflags"
  volume      date      time      size  ssid      fl
Bootstrap.001 11/18/02 21:51:18 25 KB 3646080513 cr
Bootstrap.001 11/18/02 22:01:18 26 KB 3646234113 cr
Bootstrap.001 11/18/02 22:06:19 27 KB 3646311169 cr
Bootstrap.001 11/18/02 22:11:19 28 KB 3646387969 cr
Bootstrap.001 11/18/02 22:16:18 29 KB 3646464769 cr
Bootstrap.001 11/18/02 22:21:18 30 KB 3646541569 cr
Bootstrap.001 11/18/02 22:26:18 31 KB 3646618113 cr full bootstrap
Bootstrap.001 11/18/02 22:31:18 32 KB 3646694913 cr full bootstrap
Bootstrap.001 11/18/02 22:36:19 33 KB 3646771969 cr full bootstrap
Bootstrap.001 11/18/02 22:41:18 33 KB 3646848513 cr full bootstrap
Bootstrap.001 11/18/02 22:46:18 34 KB 3646925313 cr full bootstrap
Bootstrap.001 11/18/02 22:51:18 35 KB 3647002113 cr full bootstrap
Bootstrap.002 11/18/02 22:56:19 37 KB 3647079169 cr full bootstrap
Bootstrap.002 11/18/02 23:01:18 29 KB 3647155713 hr full bootstrap
Bootstrap.003 11/18/02 23:01:18 10 KB 3647155713 tr full bootstrap
Bootstrap.003 11/18/02 23:06:18 40 KB 3647232513 cr full bootstrap
```

```
Z:\NSR\BIN>
```

Allerdings muß sich `mmrecov` jetzt etwas anders verhalten - lassen wir es einfach auf einen Versuch ankommen:

```
Z:\NSR\BIN>mmrecov
mmrecov: Using avuspcdc as server

NOTICE: mmrecov is used to recover the NetWorker server's media index and
resource files from media (backup tapes or disks) when any of this
critical NetWorker data has been lost or damaged. Note that this
command will OVERWRITE the server's existing media index. mmrecov is not
used to recover NetWorker clients' on-line indexes; normal recover
procedures may be used for this purpose. See the Legato NetWorker
Disaster Recovery Guide for more details.

Enter the latest bootstrap save set id: 3647155713
Enter starting file number (if known) [0]: 3647155713
Enter starting record number (if known) [0]: 0

Please insert the volume on which save set id 3647155713 started
into Y:\BU_DEV3. When you have done this, press <RETURN>: <cr>

Scanning Y:\BU_DEV3 for save set 3647155713; this may take a while...
scanner: scanning file disk Bootstrap.002 on Y:\BU_DEV3
Z:\nsr\res.R\nsr.res
Z:\nsr\res.R\nsrjb.res
Z:\nsr\res.R\nsrla.res
Z:\nsr\res.R\servers
Z:\nsr\res.R\
scanner: ssid 3647155713: NOT complete
scanner: ssid 3647155713: 29 KB
scanner: the following save sets continue on another volume:
client name  save set          save time    level  size  files  ssid  S
avuspcdc    bootstrap          11/18/02 23:01  f      0      0 3647155713 B
scanner: when next volume is ready, enter device name (or `q' to quit) //
[Y:\BU_DEV3]? Y:\BU_DEV4
scanner: no `NSR device' with the name of `Y:\BU_DEV4' found
scanner: starting file number (or `q' to quit) [0]? q
nsrmmdbasm -r Z:\nsr\mm\mmvolume6\
Z:\nsr\mm\mmvolume6\: file exists, overwriting
uasm: unknown error running nsrmmdbasm on file Z:\nsr\mm\mmvolume6\
uasm: invalid save stream
Y:\BU_DEV3: Mount operation in progress
mmrecov: RAP error: file disk Bootstrap.002 not in media index
mmrecov:
Cannot Mount volume on Y:\BU_DEV3
mmrecov: uasm exited with error 1

mmrecov aborted.

Z:\NSR\BIN>
```

In diesem Fall verhindert der laufende Prozeß `mmrecov`, daß das fehlende Laufwerk jetzt noch angelegt werden kann - es muß bereits vor dem Aufruf vorhanden sein.

Hier der entsprechende zweite Versuch - er ist erfolgreich:

```
Z:\NSR\BIN>mmrecov
```

```
mmrecov: Using avuspc as server
```

```
NOTICE: mmrecov is used to recover the NetWorker server's media index and resource files from media (backup tapes or disks) when any of this critical NetWorker data has been lost or damaged. Note that this command will OVERWRITE the server's existing media index. mmrecov is not used to recover NetWorker clients' on-line indexes; normal recover procedures may be used for this purpose. See the Legato NetWorker Disaster Recovery Guide for more details.
```

```
Y:\BU_DEV3
```

```
Y:\BU_DEV4
```

```
What is the name of the device you plan on using [Y:\BU_DEV3]? Y:\BU_DEV3
```

```
Enter the latest bootstrap save set id: 3647155713
```

```
Enter starting file number (if known) [0]: 3647155713
```

```
Enter starting record number (if known) [0]: 0
```

```
Please insert the volume on which save set id 3647155713 started into Y:\BU_DEV3. When you have done this, press <RETURN>: <cr>
```

```
Scanning Y:\BU_DEV3 for save set 3647155713; this may take a while...
```

```
scanner: scanning file disk Bootstrap.002 on Y:\BU_DEV3
```

```
Z:\nsr\res.R\nsr.res
```

```
Z:\nsr\res.R\nsrjb.res
```

```
Z:\nsr\res.R\nsrla.res
```

```
Z:\nsr\res.R\servers
```

```
scanner: ssid 3647155713: NOT complete
```

```
scanner: ssid 3647155713: 29 KB
```

```
Z:\nsr\res.R\
```

```
scanner: the following save sets continue on another volume:
```

client name	save set	save time	level	size	files	ssid	S
avuspc	bootstrap	11/18/02 23:01	f	0	0	3647155713	B

```
scanner: when next volume is ready, enter device name (or `q' to quit) //
```

```
[Y:\BU_DEV3]? Y:\BU_DEV4
```

```
scanner: starting file number (or `q' to quit) [0]? 3647155713
```

```
scanner: starting record number (or `q' to quit) [1]? 0
```

```
scanner: continuing scan with disk on device `Y:\BU_DEV4'
```

```
scanner: scanning file disk Bootstrap.003 on Y:\BU_DEV4
```

```
Z:\nsr\mm\
```

```
nsrmmdbasm -r Z:\nsr\mm\mmvolume6\
```

```
scanner: ssid 3647155713: scan complete
```

```
scanner: ssid 3647155713: 38 KB, 7 file(s)
```

```
Y:\BU_DEV3: mounted file disk Bootstrap.002 (write protected)
```

If your resource files were lost, they are now recovered in the 'res.R' directory. Copy or move them to the 'res' directory, after you have shut down the service. Then restart the service.

Otherwise, just restart the service.

If the on-line index for avuspc was lost, it can be recovered using the nsrck command.

```
Z:\NSR\BIN>
```

Wie Sie sehen, gibt es also auch hier keinerlei Probleme.