

Beim Clonen setzt der NetWorker 19.4.0.2 evtl. die Browse Zeit nicht richtig

Auch dieses Problem trat bei einem Kunden auf, der eine etwas komplexere NetWorker Installation besitzt. Er benutzt ausschließlich DDBoost Devices ...

- Zum Backup auf einer Data Domain
- Zur Langzeitarchivierung auf einer ECS

Zur Lastverteilung benutzt er hierfür 2 Storage Nodes:

- Der eine wird mit den DDBoost Laufwerken verbunden
- Der andere steuert die Disk Laufwerke in der internen ECS Cloud an.

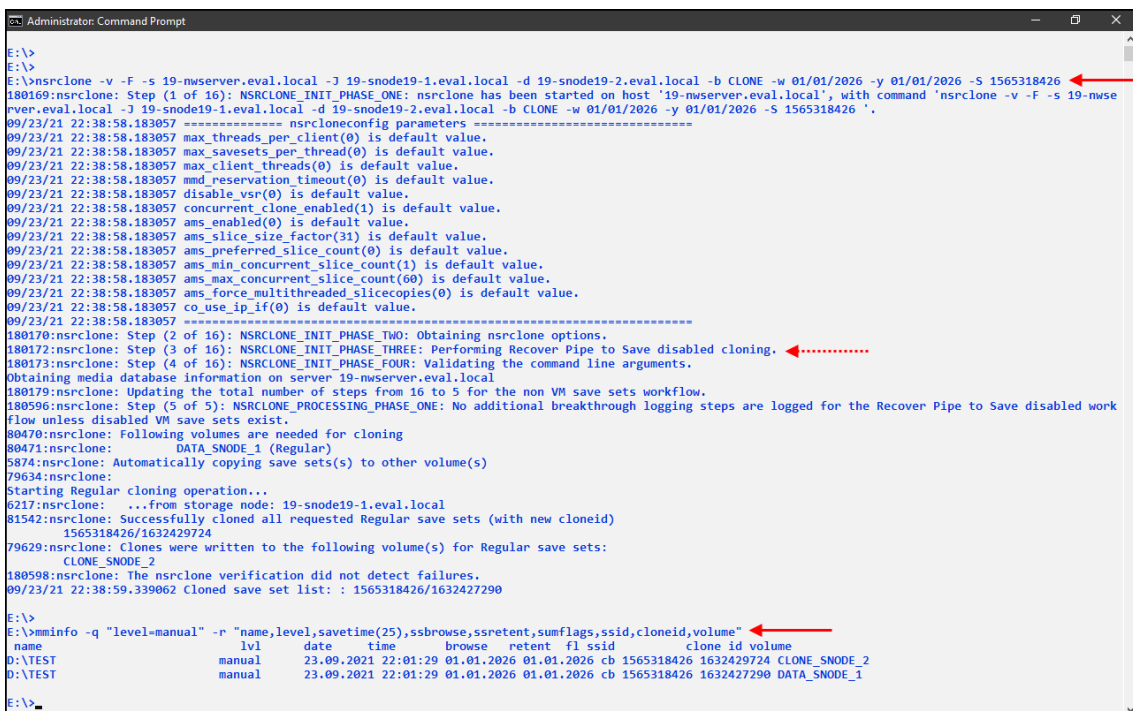
Zum Clonen der Backups benutzt der Kunde PowerShell Scripts. Auf diese Weise können die Storage Nodes gezielt angesprochen werden und die Retention Zeit der ‚archivierten‘ Save Sets läßt sich auf ein bestimmtes, immer gleiches Datum festlegen. Auf diese Weise läßt sich am Ende eines Clone Zyklus die Anzahl dieser Sicherungen relativ leicht auf Richtigkeit überprüfen.

Generell folgt solch ein Clone-Befehl diesem Aufbau:

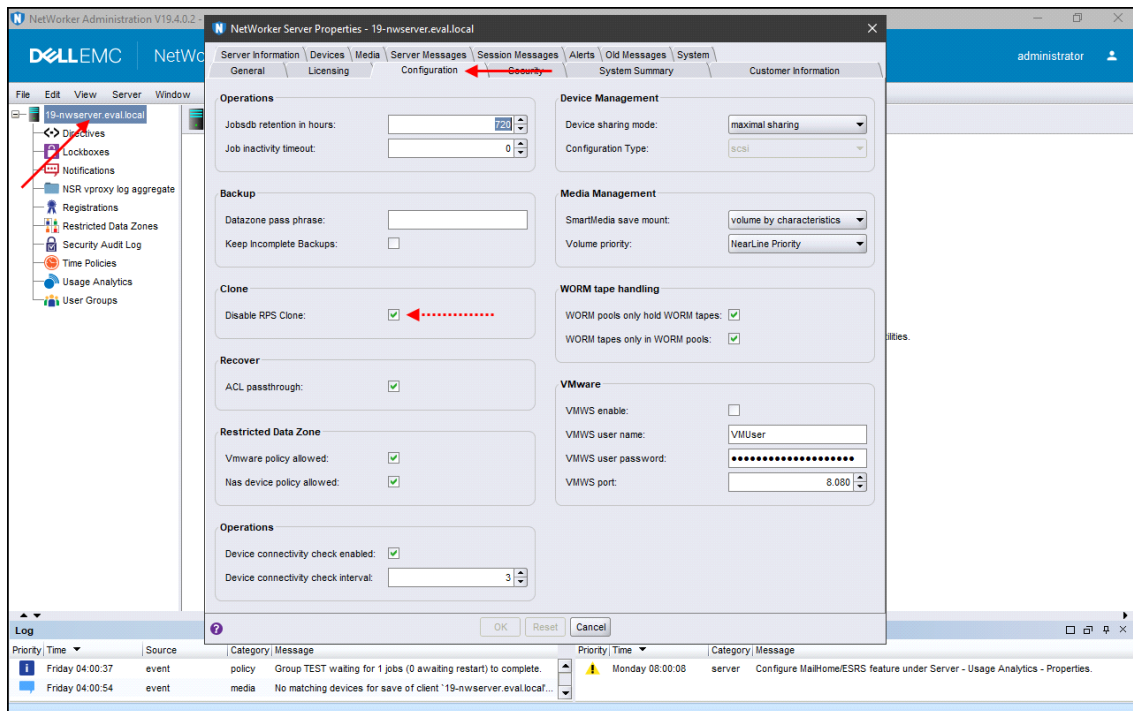
```
nsrclone -v -F -s nw_server -J snode1 -d snode2 -b clone_pool //
-w mm/dd/yyyy -y mm/dd/yyyy -S ssid
```

Hierbei fiel ihm auf, daß die Browse Zeit nicht richtig gesetzt wurde.

Mit den Standard-Parametern konnte ich das Problem jedoch nicht verifizieren:



Allerdings fiel mir auf, daß bei seinem Server die Option *Recover Pipe to Save (RPS)* nicht wie üblich abgeschaltet war. So sollte es eigentlich aussehen (das ist auch die Standardeinstellung):



Bei seiner Konfiguration war dies allerdings nicht der Fall. Dabei erinnerte ich mich, daß es in früheren Versionen bereits heftige Probleme mit dieser Option gegeben hatte. Hierzu finden Sie mindestens ein weiteres Dokument auf meiner Seite.

Umgehend führte ich also bei mir die Gegenprobe durch. Das Ergebnis sehen Sie auf den nächsten Seiten.

```

E:\>nsrclone -v -F -s 19-nwserver.eval.local -J 19-snode19-1.eval.local -d 19-snode19-2.eval.local -b CLONE -w 01/01/2027 //
-y 01/01/2027 -S 1565318426
180169:nsrclone: Step (1 of 16): NSRCLONE_INIT_PHASE_ONE: nsrclone has been started on host '19-nwserver.eval.local', with command
'nsrclone -v -F -s 19-nwserver.eval.local -J 19-snode19-1.eval.local -d 19-snode19-2.eval.local -b CLONE -w 01/01/2027 -y 01/01/2027
-S 1565318426 '.
09/23/21 22:41:57.675192 ===== nsrcloneconfig parameters =====
09/23/21 22:41:57.690547 max_threads_per_client(0) is default value.
09/23/21 22:41:57.690547 max_savesets_per_thread(0) is default value.
09/23/21 22:41:57.690547 max_client_threads(0) is default value.
09/23/21 22:41:57.690547 mmd_reservation_timeout(0) is default value.
09/23/21 22:41:57.690547 disable_vsr(0) is default value.
09/23/21 22:41:57.690547 concurrent_clone_enabled(1) is default value.
09/23/21 22:41:57.690547 ams_enabled(0) is default value.
09/23/21 22:41:57.690547 ams_slice_size_factor(31) is default value.
09/23/21 22:41:57.690547 ams_preferred_slice_count(0) is default value.
09/23/21 22:41:57.690547 ams_min_concurrent_slice_count(1) is default value.
09/23/21 22:41:57.690547 ams_max_concurrent_slice_count(60) is default value.
09/23/21 22:41:57.690547 ams_force_multithreaded_sliceopies(0) is default value.
09/23/21 22:41:57.690547 co_use_ip_if(0) is default value.
09/23/21 22:41:57.690547 =====
180170:nsrclone: Step (2 of 16): NSRCLONE_INIT_PHASE_TWO: Obtaining nsrclone options.
180171:nsrclone: Step (3 of 16): NSRCLONE_INIT_PHASE_THREE: Performing Recover Pipe to Save enabled cloning.
180173:nsrclone: Step (4 of 16): NSRCLONE_INIT_PHASE_FOUR: Validating the command line arguments.
Obtaining media database information on server 19-nwserver.eval.local
180174:nsrclone: Step (5 of 16): NSRCLONE_PROCESSING_PHASE_ONE: Submitting all save sets for Recover Pipe to Save processing.
180184:nsrclone: Step (6 of 16): NSRCLONE_PROCESSING_PHASE_TWO: List of save sets is requested for cloning.
1565318426;
180206:nsrclone: Step (7 of 16): NSRCLONE_PROCESSING_PHASE_THREE: Sending the media reservation request for the current save set
list.
180208:nsrclone: Step (8 of 16): NSRCLONE_PROCESSING_PHASE_FOUR: Found the recover storage node '19-snode19-1.eval.local' for source
volume '1615649298'.
180883:nsrclone: Step (9 of 16): NSRCLONE_PROCESSING_PHASE_FIVE: Successfully received the device (nsrmmd) reservation for
source volume '1615649298' and destination volume '1531766364'.
198249:nsrclone: Step (10 of 16): NSRCLONE_PROCESSING_PHASE_SIX: Launching the nsrrecovery job on host '19-snode19-1.eval.local' with
source volume '1615649298' and requested(not guaranteed) destination volume '1531766364' with command 'nsrrecovery -s 19-
nwserver.eval.local -c 19-nwserver.eval.local -o CLONE'.
198250:nsrclone: Step (11 of 16): NSRCLONE_PROCESSING_PHASE_SEVEN: Launched the nsrrecovery job on host '19-snode19-1.eval.local' for
source volume '1615649298' and requested(not guaranteed) destination volume '1531766364' with job ID 65082.
140990:nsrclone: Backend started: job Id(65082).
180241:nsrrecovery: Step (A of D) for PID-4196 with job ID 65082: NSRRECOVERY_DATA_MOVEMENT_PHASE_A: Process nsrrecovery has been started
on host '19-snode19-1.eval.local'.
----- Send RPS clone request for 19-nwserver.eval.local to 19-snode19-1.eval.local -----
retention:1798844399 browse:1798758000
.....

```

Schon hier fällt auf, daß die beiden Zeitstempel unterschiedlich sind!

```

.....
      AMS enabled: No;
      AMS force multithreaded: No;
AMS max concurrent slice count: 60;
AMS min concurrent slice count: 1;
      AMS preferred slice count: 0;
      AMS slice size factor: 31;
      job id: 65082;
nsr clone group operation type: Regular type;
nsr clone in immediate mode: Yes;
      save sets: 1565318426/1632427290;
      volume id: 1615649298;
181611:nsrclone: List of 1 save sets is requested to clone by nsrrecopy with job ID 65082.
1565318426/1632427290;
jobid=65082 for nsrrecopy on host 19-snode19-1.eval.local using 19-nwserver.eval.local as server name in rps_info_t.
181293:nsrrecopy: Step (B of D) for PID-4196 with job ID 65082: NSRRECOPY_DATA_MOVEMENT_PHASE_B: Performing a regular clone.
180218:nsrrecopy: Step (C of D) for PID-4196 with job ID 65082: NSRRECOPY_DATA_MOVEMENT_PHASE_C: Reading the Recovery Pipe to Save
inputs.
09/23/21 22:42:36.523465 Clone pool size used:1
180250:nsrrecopy: Job ID 65082: Adding new work items.
180211:nsrrecopy: 1565318426/1632427290.
174908:nsrrecopy:Saving the backup data in the pool 'CLONE'.
140997:nsrclone: Send EOF to backend : job Id(65082).
175019:nsrrecopy:Received the media management binding information on the host '19-snode19-2.eval.local'.
174910:nsrrecopy:Connected to the nsrmmmd process on the host '19-snode19-2.eval.local'.
180249:nsrrecopy: Job ID 65082: Completed the cloning for save set ID 1565318426.
jobid=65082 for nsrrecopy on host 19-snode19-1.eval.local using 19-nwserver.eval.local as server name in rps_info_t.
09/23/21 22:42:43.633215 nsrrecopy exiting
180244:nsrrecopy: Step (D of D) for PID-4196 with job ID 65082: NSRRECOPY_DATA_MOVEMENT_PHASE_D: Recover Pipe to Save succeeded.
180194:nsrclone: Step (12 of 16): NSRCLONE_TERMINATE_PHASE_ONE: The nsrrecopy job with job ID 65082 is exiting.
198251:nsrclone: Step (13 of 16): NSRCLONE_TERMINATE_PHASE_TWO: Cancelling the media multiplexor daemon reservation for source
volume '1615649298' and requested(not guaranteed) destination volume '1531766364' with job ID 65082.
180196:nsrclone: Step (14 of 16): NSRCLONE_TERMINATE_PHASE_THREE: Clone operation is exiting with job_exit_status=0 (before):
jobid=65082, args.exit_status=0.
      RPS CLONE RESULTS
      [ORIGINAL REQUESTED SAVESETS]
1565318426;
      [CLONE SUCCESS SAVESETS]
1565318426/1632430804;
180187:nsrclone: Step (15 of 16): NSRCLONE_TERMINATE_PHASE_FOUR: The nsrclone verification did not detect failures.
09/23/21 22:42:30.052263 Cloned save set list: : 1565318426
180175:nsrclone: Step (16 of 16): NSRCLONE_TERMINATE_PHASE_FIVE: The nsrclone program completed.

E:\>

```

Der Vorgang selbst lief völlig problemlos ab.

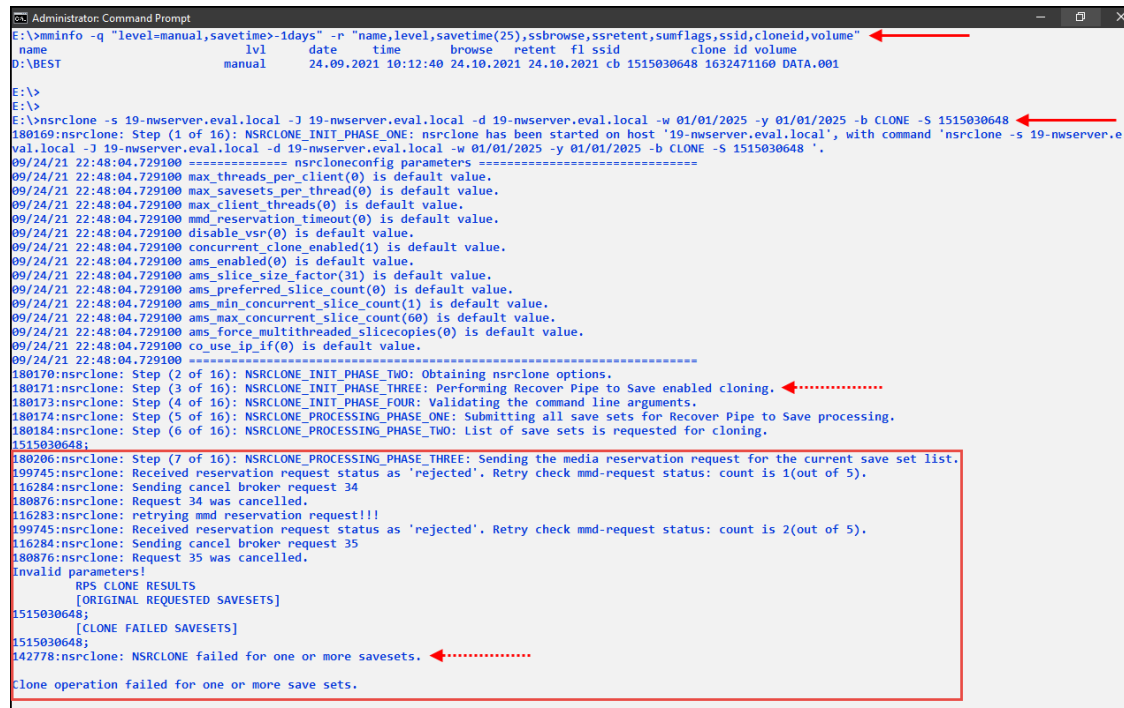
Allerdings bestätigte der Blick in den Medien-Index meine Vermutung, daß beide Zeiten nicht gleich waren:

```
E:\>
E:\>mminfo -q "level>manual" -r "name,level,savetime(25),ssbrowse,ssretent,sumflags,ssid,cloneid,volume"
   name          lvl      date      time      browse  retent  fl  ssid          clone id volume
D:\TEST          manual    23.09.2021 22:01:29 01.01.2026 01.01.2027 cb 1565318426 1632430804 CLONE_SNODE_2
D:\TEST          manual    23.09.2021 22:01:29 01.01.2026 01.01.2027 cb 1565318426 1632427290 DATA_SNODE_1

E:\>
```

Das Abschalten der Option *RPS Clone* führte dann auch bei dem Kunden zur sofortigen Lösung des Problems.

Übrigens tritt das Problem auch nicht auf, wenn ein ‚einfacher‘ `nsrclone` Befehl mit ausschließlich lokalen Laufwerken am NetWorker Server gestartet wird. Hierbei ist die Einstellung der RPS Clone Option offenbar wirkungslos.



```
Administrator: Command Prompt
E:\>mminfo -q "level>manual,savetime-1days" -r "name,level,savetime(25),ssbrowse,ssretent,sumflags,ssid,cloneid,volume"
   name          lvl      date      time      browse  retent  fl  ssid          clone id volume
D:\BEST          manual    24.09.2021 10:12:40 24.10.2021 24.10.2021 cb 1515030648 1632471160 DATA_001

E:\>
E:\>
E:\>nsrclone -s 19-mserver.eval.local -j 19-mserver.eval.local -d 19-mserver.eval.local -w 01/01/2025 -y 01/01/2025 -b CLONE -s 1515030648
180169:nsrclone: Step (1 of 16): NSRCLONE_INIT_PHASE_ONE: nsrclone has been started on host '19-mserver.eval.local', with command 'nsrclone -s 19-mserver.e
val.local -j 19-mserver.eval.local -d 19-mserver.eval.local -w 01/01/2025 -y 01/01/2025 -b CLONE -s 1515030648 '.
09/24/21 22:48:04.729100 ===== nsrcloneconfig parameters =====
09/24/21 22:48:04.729100 max_threads_per_client(0) is default value.
09/24/21 22:48:04.729100 max_savesets_per_thread(0) is default value.
09/24/21 22:48:04.729100 max_client_threads(0) is default value.
09/24/21 22:48:04.729100 mmd_reservation_timeout(0) is default value.
09/24/21 22:48:04.729100 disable_vsr(0) is default value.
09/24/21 22:48:04.729100 concurrent_clone_enabled(1) is default value.
09/24/21 22:48:04.729100 ams_enabled(0) is default value.
09/24/21 22:48:04.729100 ams_slice_size_factor(31) is default value.
09/24/21 22:48:04.729100 ams_preferred_slice_count(0) is default value.
09/24/21 22:48:04.729100 ams_min_concurrent_slice_count(1) is default value.
09/24/21 22:48:04.729100 ams_max_concurrent_slice_count(60) is default value.
09/24/21 22:48:04.729100 ams_force_multithreaded_sliceopies(0) is default value.
09/24/21 22:48:04.729100 co_use_ip_if(0) is default value.
09/24/21 22:48:04.729100 =====
180170:nsrclone: Step (2 of 16): NSRCLONE_INIT_PHASE_TWO: obtaining nsrclone options.
180171:nsrclone: Step (3 of 16): NSRCLONE_INIT_PHASE_THREE: Performing Recover Pipe to Save enabled cloning.
180173:nsrclone: Step (4 of 16): NSRCLONE_INIT_PHASE_FOUR: Validating the command line arguments.
180174:nsrclone: Step (5 of 16): NSRCLONE_PROCESSING_PHASE_ONE: Submitting all save sets for Recover Pipe to Save processing.
180184:nsrclone: Step (6 of 16): NSRCLONE_PROCESSING_PHASE_TWO: List of save sets is requested for cloning.
1515030648:
180206:nsrclone: Step (7 of 16): NSRCLONE_PROCESSING_PHASE_THREE: Sending the media reservation request for the current save set list.
199745:nsrclone: Received reservation request status as 'rejected'. Retry check mmd-request status: count is 1(out of 5).
116284:nsrclone: Sending cancel broker request 34
180876:nsrclone: Request 34 was cancelled.
116283:nsrclone: retrying mmd reservation request!!!
199745:nsrclone: Received reservation request status as 'rejected'. Retry check mmd-request status: count is 2(out of 5).
116284:nsrclone: Sending cancel broker request 35
180876:nsrclone: Request 35 was cancelled.
Invalid parameters!
RPS CLONE RESULTS
[ORIGINAL REQUESTED SAVESETS]
1515030648:
[CLONE FAILED SAVESETS]
1515030648:
142778:nsrclone: NSRCLONE failed for one or more savesets.
Clone operation failed for one or more save sets.
```

Übrigens führt die RPS Option bei lokalen Operationen (der NetWorker Server ist hier Read- wie auch Write-Storage Node) in keinem Fall zu einem Erfolg, ganz egal, ob Sie den Befehl in seiner vollen Länge ...

```

Administrator: Command Prompt
E:\>xmminfo -q "level=manual,savetime>1days" -r "name,level,savetime(25),ssbrowse,ssretent,sumflags,ssid,cloneid,volume"
  name      lvl      date      time      browse      retent      fl      ssid      clone id      volume
D:\BEST    manual   24.09.2021 10:12:40  24.10.2021  24.10.2021  cb      1515030648  1632471160  DATA.001

E:\>
E:\>nsrclone -s 19-nwserver.eval.local -J 19-nwserver.eval.local -d 19-nwserver.eval.local -w 01/01/2025 -y 01/01/2025 -b CLONE -S 1515030648
180169:nsrclone: Step (1 of 16): NSRCLONE_INIT_PHASE_ONE: nsrclone has been started on host '19-nwserver.eval.local', with command 'nsrclone -s 19-nwserver.e
val.local -J 19-nwserver.eval.local -d 19-nwserver.eval.local -w 01/01/2025 -y 01/01/2025 -b CLONE -S 1515030648 '.
09/24/21 22:48:04.729100 ===== nsrcloneconfig parameters =====
09/24/21 22:48:04.729100 max_threads_per_client(0) is default value.
09/24/21 22:48:04.729100 max_save sets_per_thread(0) is default value.
09/24/21 22:48:04.729100 max_client_threads(0) is default value.
09/24/21 22:48:04.729100 mmd_reservation_timeout(0) is default value.
09/24/21 22:48:04.729100 disable_vsr(0) is default value.
09/24/21 22:48:04.729100 concurrent_clone_enabled(1) is default value.
09/24/21 22:48:04.729100 ams_enabled(0) is default value.
09/24/21 22:48:04.729100 ams_slice_size_factor(31) is default value.
09/24/21 22:48:04.729100 ams_preferred_slice_count(0) is default value.
09/24/21 22:48:04.729100 ams_min_concurrent_slice_count(1) is default value.
09/24/21 22:48:04.729100 ams_max_concurrent_slice_count(60) is default value.
09/24/21 22:48:04.729100 ams_force_multithreaded_slice copies(0) is default value.
09/24/21 22:48:04.729100 co_use_ip_if(0) is default value.
09/24/21 22:48:04.729100 =====
180170:nsrclone: Step (2 of 16): NSRCLONE_INIT_PHASE_TWO: Obtaining nsrclone options.
180171:nsrclone: Step (3 of 16): NSRCLONE_INIT_PHASE_THREE: Performing Recover Pipe to Save enabled cloning.
180173:nsrclone: Step (4 of 16): NSRCLONE_INIT_PHASE_FOUR: Validating the command line arguments.
180174:nsrclone: Step (5 of 16): NSRCLONE_PROCESSING_PHASE_ONE: Submitting all save sets for Recover Pipe to Save processing.
180184:nsrclone: Step (6 of 16): NSRCLONE_PROCESSING_PHASE_TWO: List of save sets is requested for cloning.
1515030648;
180206:nsrclone: Step (7 of 16): NSRCLONE_PROCESSING_PHASE_THREE: Sending the media reservation request for the current save set list.
199745:nsrclone: Received reservation request status as 'rejected'. Retry check mmd-request status: count is 1(out of 5).
116284:nsrclone: Sending cancel broker request 34
180876:nsrclone: Request 34 was cancelled.
116283:nsrclone: retrying mmd reservation request!!!
199745:nsrclone: Received reservation request status as 'rejected'. Retry check mmd-request status: count is 2(out of 5).
116284:nsrclone: Sending cancel broker request 35
180876:nsrclone: Request 35 was cancelled.
Invalid parameters!
RPS CLONE RESULTS
[ORIGINAL REQUESTED SAVESETS]
1515030648;
[CLONE FAILED SAVESETS]
1515030648;
142778:nsrclone: NSRCLONE failed for one or more save sets.
Clone operation failed for one or more save sets.
  
```

... oder in seiner kürzesten Form eingeben:

```

Administrator: Command Prompt
E:\>
E:\>xmminfo -q "level=manual,savetime>1days" -r "name,level,savetime(25),ssbrowse,ssretent,sumflags,ssid,cloneid,volume"
  name      lvl      date      time      browse      retent      fl      ssid      clone id      volume
D:\BEST    manual   24.09.2021 10:12:40  24.10.2021  24.10.2021  cb      1515030648  1632471160  DATA.001

E:\>
E:\>nsrclone -w 01/01/2025 -y 01/01/2025 -b CLONE -S 1515030648
180169:nsrclone: Step (1 of 16): NSRCLONE_INIT_PHASE_ONE: nsrclone has been started on host '19-nwserver.eval.local', with command 'nsrclone -w 01/01/2025 -y
01/01/2025 -b CLONE -S 1515030648 '.
09/24/21 22:56:01.924615 ===== nsrcloneconfig parameters =====
09/24/21 22:56:01.924615 max_threads_per_client(0) is default value.
09/24/21 22:56:01.924615 max_save sets_per_thread(0) is default value.
09/24/21 22:56:01.924615 max_client_threads(0) is default value.
09/24/21 22:56:01.924615 mmd_reservation_timeout(0) is default value.
09/24/21 22:56:01.924615 disable_vsr(0) is default value.
09/24/21 22:56:01.924615 concurrent_clone_enabled(1) is default value.
09/24/21 22:56:01.924615 ams_enabled(0) is default value.
09/24/21 22:56:01.924615 ams_slice_size_factor(31) is default value.
09/24/21 22:56:01.924615 ams_preferred_slice_count(0) is default value.
09/24/21 22:56:01.924615 ams_min_concurrent_slice_count(1) is default value.
09/24/21 22:56:01.924615 ams_max_concurrent_slice_count(60) is default value.
09/24/21 22:56:01.924615 ams_force_multithreaded_slice copies(0) is default value.
09/24/21 22:56:01.924615 co_use_ip_if(0) is default value.
09/24/21 22:56:01.924615 =====
180170:nsrclone: Step (2 of 16): NSRCLONE_INIT_PHASE_TWO: Obtaining nsrclone options.
180171:nsrclone: Step (3 of 16): NSRCLONE_INIT_PHASE_THREE: Performing Recover Pipe to Save enabled cloning.
180173:nsrclone: Step (4 of 16): NSRCLONE_INIT_PHASE_FOUR: Validating the command line arguments.
180174:nsrclone: Step (5 of 16): NSRCLONE_PROCESSING_PHASE_ONE: Submitting all save sets for Recover Pipe to Save processing.
180184:nsrclone: Step (6 of 16): NSRCLONE_PROCESSING_PHASE_TWO: List of save sets is requested for cloning.
1515030648;
180206:nsrclone: Step (7 of 16): NSRCLONE_PROCESSING_PHASE_THREE: Sending the media reservation request for the current save set list.
199745:nsrclone: Received reservation request status as 'rejected'. Retry check mmd-request status: count is 1(out of 5).
116284:nsrclone: Sending cancel broker request 39
180876:nsrclone: Request 39 was cancelled.
116283:nsrclone: retrying mmd reservation request!!!
199745:nsrclone: Received reservation request status as 'rejected'. Retry check mmd-request status: count is 2(out of 5).
116284:nsrclone: Sending cancel broker request 40
180876:nsrclone: Request 40 was cancelled.
Invalid parameters!
RPS CLONE RESULTS
[ORIGINAL REQUESTED SAVESETS]
1515030648;
[CLONE FAILED SAVESETS]
1515030648;
142778:nsrclone: NSRCLONE failed for one or more save sets.
Clone operation failed for one or more save sets.
  
```



Mein Guter Rat: Lassen Sie die Option *Disable RPS Clone* in jedem Fall in der Standard-Einstellung (siehe Seite 1).