# NetApp

**XCP** 참조
XCP

NetApp
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# 목차

# XCP 참조

## XCP 명령 참조 개요

XCP 명령 참조는 XCP NFS 및 SMB에 사용할 수 있는 명령의 예를 제공합니다. 각 명령에는 필요에 따라 단독으로 또는 조합하여 사용할 수 있는 추가 매개 변수가 있습니다. XCP는 심각도 수준에 따라 로그 파일 순환 및 로그 필터링을 지원합니다.

## NFS 명령 참조입니다

도움말

NFS `help` Command 명령 명령 목록, 명령 매개 변수 및 각 매개 변수에 대한 간략한 설명을 표시합니다. 를 클릭합니다 `help` 명령은 XCP 도구를 처음 사용하는 초보자에게 유용합니다.

구문

```
xcp help
```

```
[root@client1 linux]# ./xcp help
 USAGE:
xcp [[help] [command]| -version]
optional arguments:
help Show XCP help message and exit
-version Show XCP version number and exit
To see help text, you can run:
xcp help Display this content
xcp help info Step by step usage of all commands
xcp help <command> Individual command help
command:
activate Activate an XCP license on the current host
license Show XCP license information
show Request information from host about NFS exports
scan Read all the files from export path
copy Recursively copy everything from source to target
resume Resume copy operation from the point it was halted
sync Synchronize increment changes on source to target after copy
isync Sync changes on target without index
verify Verify that the target is the same as the source
delete Delete data on the NFS exported volume
chown Change the ownership on the NFS exported volume
chmod Change the permissions on the NFS exported volume
logdump Collect all logs related to the XCP job and dump those into
        a zipped folder named <ID>.zip under the current dir
estimate Estimate the time taken for the copy command to complete
indexdelete Remove indexes from catalog
```

## 도움말 정보

를 사용합니다 `info` 매개 변수 `help` 설명서, 예제 및 튜닝 권장 사항을 표시하는 명령입니다.

## 구문

```
xcp help info
```

예제 보기

```
[root@client1 linux]# ./xcp help info
COMMAND
info


USAGE
help info


DESCRIPTION
Step by step usage of the XCP command. Follow these steps after you
copy the binary and license

1. Download the XCP license and XCP binary to the Linux machine. Run
XCP activate: xcp activate

2. On a fresh system, the above command will fail when looking for a
license in
/opt/NetApp/xFiles/xcp.
Copy the XCP license to /opt/NetApp/xFiles/xcp and run the activate
command again: xcp activate


3. Check the validity of the license: xcp license


4. Configure the ini file located at /opt/NetApp/xFiles/xcp/xcp.ini
with catalog details: add catalog = catalog_nfs_server:/catalog_path


5. List all the exports and details from the NFS server: xcp show
server


6. Pick up one of the exports and run a scan of the export: xcp scan
server:/export1


7. Initiate baseline copy:
xcp copy -newid id1 server:/export1 server2:/e

8. If the copy is halted for some reason, you can use the "xcp resume"
command to resume the copy operation:
xcp resume -id id1
```

9. Start with incremental sync after the baseline is completed:
xcp sync -id id1

10. After copy or after every sync, you can verify to check data integrity:
xcp verify server:/export1 server2:/export2

SUPPORTED COMMANDS
help: Display information about commands and options
 -exclude: Display examples of filters
 -fmt: Display examples of filters
 -match: Display examples of filters
help info: Display documentation, examples, and tuning recommendations
show: Request information from hosts about NFS and other RPC services
 -v: Show more detailed information about servers
 -loglevel <name>: Option to set log level; available levels are INFO, DEBUG (default: INFO)
scan: Read all the directories in a file tree or a saved index
 -l, -q: File listing output formats
 -stats, -csv, -html: Tree statistics report formats
 -nonames: Do not look up user and group names for file listings or reports
 -newid <name>: Catalog name for a new index
 -id <name>: Catalog name of a previous copy or scan index
 -match <filter>: Only process files and directories that match the filter
 -fmt <string expression>: Formatted output
 -du: Summarize space usage of each directory, including subdirectories
 -md5: Checksum the files (also save the checksum files when indexing) (default: False)
 -duk: Summarize space usage of directory, include subdirectories, with output in kilobytes
 -acl4: Process NFSv4 access control lists (ACLs)
 -acl4.threads <n>: Per-process thread pool size (default: 100)
 -depth <n>: Limit the search depth
 -dircount <n[k]>: Request size for reading directories (default: 64k)
 -edupe: Include deduplication estimate in reports (see documentation for details)
 -bs <n[k]>: Read/write block size for scans that read data with -md5 or -edupe (default: 64k)
 -parallel <n>: Maximum concurrent batch processes (default: 7)
 -noId: Disable the creation of a default index (default: False)
 -exclude <filter>: Exclude the files and directories that match the

```
filter
 -preserve-atime: preserve atime of the file/dir (default: False)
 -nodes <name>: comma-separated list of worker nodes
 -s3.insecure: use http instead of https
 -s3.noverify: do not verify ssl certificates
 -s3.endpoint <S3 endpoint Url>: path such as https://10.10.10.101:1010
 -s3.profile <profile-name>: config/cred profile to be used
 -loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)
copy: Recursively copy everything from source to target
 -newid <name>: Catalog name for a new index
 -md5: Checksum the files (also save the checksum files when indexing)
(default: False)
 -edupe: Include deduplication estimate in reports (see documentation
for details)
 -nonames: Do not look up user and group names for file listings or
reports
 -acl4: Process NFSv4 access control lists (ACLs)
 -acl4.threads <n>: Per-process thread pool size (default: 100)
 -acl4.alwaysset: call "setacl" for all ACL-capable files and
directories
 -bs <n[k]>: read/write blocksize (default: 64k)
 -dircount <n[k]>: Request size for reading directories (default: 64k)
 -parallel <n>: Maximum concurrent batch processes (default: 7)
 -noId: Disable the creation of a default index (default: False)
 -match <filter>: Only process files and directories that match the
filter
 -exclude <filter>: Exclude the files and directories that match the
filter
 -copybatch <filename [args]>: custom batch processing module
 -chown: set destination uid and gid when copying as non-root    user
(default: False)
 -preserve-atime: preserve atime of the file/dir (default: False)
 -nodes <name>: comma-separated list of worker nodes
 -s3.insecure: use http instead of https
 -s3.noverify: do not verify ssl certificates
 -s3.endpoint <S3 endpoint Url>: path such as https://10.10.10.101:1010
 -loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)
verify: Verify that the target is the same as the source
[no options]: Full verification of target structure, names, attributes,
and data
-stats, -csv: Scan source and target trees in parallel and compare tree
statistics
-nodata: Do not check data
-noattrs: Do not check attributes (default: False)
```

-noown: Do not check ownership (uid and gid) (default: False)
-nomods: Do not check file modification times
-mtimewindow <s>: Acceptable modification time difference for verification
-newid <name>: Catalog name for a new index
-v, -l: Output formats to list any differences found
-acl4: Process NFSv4 access control lists (ACLs)
-acl4.threads <n>: Per-process thread pool size (default: 100)
-nonames: Do not look up user and group names for file listings or reports
-match <filter>: Only process files and directories that match the filter
-bs <n[k]>: read/write blocksize (default: 64k)
-parallel <n>: Maximum concurrent batch processes (default: 7)
-dircount <n[k]>: Request size for reading directories (default: 64k)
-noId: Disable the creation of a default index (default: False)
-exclude <filter>: Exclude the files and directories that match the filter
-preserve-atime: preserve atime of the file/dir (default: False)
-s3.insecure: use http instead of https
-s3.noverify: do not verify ssl certificates
-s3.endpoint <S3 endpoint Url>: path such as https://10.10.10.101:1010
-s3.profile <profile-name>: config/cred profile to be used
-loglevel <name>: Option to set log level; available levels are INFO, DEBUG (default: INFO)

sync: Find all source changes and apply them to the target
-id <name>: Catalog name of a previous copy index
-snap <name or path>: Access a Snapshot copy of the source tree
-nonames: Do not look up user and group names for file listings or reports
-bs <n[k]>: read/write blocksize (default: 64k)
-dircount <n[k]>: Request size for reading directories (default: 64k)
-parallel <n>: Maximum concurrent batch processes (default: 7)
-acl4.threads <n>: Per-process thread pool size (default: 100)
-exclude <filter>: Exclude the files and directories that match the filter
-preserve-atime: preserve atime of the file/dir (default: False)
-loglevel <name>: Option to set log level; available levels are INFO, DEBUG (default: INFO)

sync dry-run: Find source changes but don't apply them to the target
-id <name>: Catalog name of a previous copy index
-snap <name or path>: Access a Snapshot copy of the source tree
-stats: Deep scan the modified directories and report on everything new
-nonames: Do not look up user and group names for file listings or

```
reports
-v, -l, -q: File listing output formats
-dircount <n[k]>: Request size for reading directories (default: 64k)
-parallel <n>: Maximum concurrent batch processes (default: 7)
-target: Check that the target files match the index
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)


isync: Sync changes on target without index
  -nodata: Do not check data
  -noattrs: Do not check attributes
  -nomods: Do not check file modification times
  -mtimewindow <s>: Acceptable modification time difference for
verification
  -acl4: Process NFSv4 access control lists (ACLs)
  -acl4.threads <n>: Per-process thread pool size (default: 100)
  -acl4.alwaysset: call "setacl" for all ACL-capable files and
directories
  -match <filter>: Only process files and directories that match the
filter
  -bs <n[k]>: read/write blocksize (default: 64k)
  -parallel <n>: Maximum concurrent batch processes (default: 7)
  -dircount <n[k]>: Request size for reading directories (default: 64k)
  -exclude <filter>: Exclude the files and directories that match the
filter
  -newid <name>: Catalog name for a new index
  -loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)
  -preserve-atime: preserve atime of the file/dir (default: False)
  -s3.insecure: use http instead of https
  -s3.noverify: do not verify ssl certificates
  -s3.endpoint <S3 endpoint Url>: path such as
https://10.10.10.101:1010
  -s3.profile <profile-name>: config/cred profile to be used


 isync estimate: Find the estimated time to complete the next isync
command
  -nodata: Do not check data
  -noattrs: Do not check attributes
  -nomods: Do not check file modification times
  -mtimewindow <s>: Acceptable modification time difference for
verification
  -acl4: Process NFSv4 access control lists (ACLs)
  -acl4.threads <n>: Per-process thread pool size (default: 100)
  -acl4.alwaysset: call "setacl" for all ACL-capable files and
```

```
directories
    -match <filter>: Only process files and directories that match the
filter
    -bs <n[k]>: read/write blocksize (default: 64k)
    -parallel <n>: Maximum concurrent batch processes (default: 7)
    -dircount <n[k]>: Request size for reading directories (default: 64k)
    -exclude <filter>: Exclude the files and directories that match the
filter
    -loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)
    -preserve-atime: preserve atime of the file/dir (default: False)
    -s3.insecure: use http instead of https
    -s3.noverify: do not verify ssl certificates
    -s3.endpoint <S3 endpoint Url>: path such as
https://10.10.10.101:1010
    -s3.profile <profile-name>: config/cred profile to be used
    -id <name>: Catalog name of a previous copy index

resume: Restart an interrupted copy
-id <name>: Catalog name of a previous copy index
-bs <n[k]>: read/write
-s3.insecure: use http instead of https
-s3.noverify: do not verify ssl certificates
-s3.endpoint <S3 endpoint Url>: path such as https://10.10.10.101:1010
-s3.profile <profile-name>: config/cred profile to be used
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)




delete: Delete everything recursively
-match <filter>: Only process files and directories that match the
filter
-force: Delete without confirmation
-removetopdir: remove directory including children
-exclude <filter>: Exclude the files and directories that match the
filter
-parallel <n>: Maximum concurrent batch processes (default: 7)
-preserve-atime: preserve atime of the file/dir (default: False)
-s3.insecure: use http instead of https
-s3.noverify: do not verify ssl certificates
-s3.endpoint <S3 endpoint Url>: path such as https://10.10.10.101:1010
-s3.profile <profile-name>: config/cred profile to be used
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)
```

```
activate: Activate a license on the current host
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)


license: Show xcp license info


license update: Retrieve the latest license from the XCP server


chown: changing ownership of a file object
exclude <filter>: Exclude the files and directories that match the
filter
-match <filter>: Only process files and directories that match the
filter
-group <group>: linux gid to be set at source
-user <user>: linux uid to be set at source
-user-from <userFrom>: user to be changed
-group-from <groupFrom>: group to be changed
-reference <reference>: referenced file or directory point
-v: reports output for every object processed
-preserve-atime: preserve atime of the file/dir (default: False)
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)


chmod: changing permissions of a file object
-exclude <filter>: Exclude the files and directories that match the
filter
-match <filter>: Only process files and directories that match the
filter
-reference <reference>: referenced file or directory point
-v: reports output for every object processed
-mode <mode>: mode to be set
-preserve-atime: preserve atime of the file/dir (default: False)
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)


logdump: Collect all logs related to the XCP job and dump those into a
zipped folder named <ID>.zip under current dir
-m <migration ID>: Filter logs by migration ID
-j <job ID>: Filter logs by job ID


estimate: Use a saved scan index to estimate copy time
```

```
-id <name>: Catalog name of a previous copy or scan index
-gbit <n>: Gigabits of bandwidth to estimate best-case time (default:
1)
-target <path>: Target to use for live test copy
-t <n[s|m|h]>: Duration of live test copy (default: 5m)
-bs <n[k]>: read/write blocksize (default: 64k)
-dircount <n[k]>: Request size for reading directories (default: 64k)
-parallel <n>: Maximum concurrent batch processes (default: 7)
preserve-atime:
 preserve atime of the file/dir (default: False)
-loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)


indexdelete: delete catalog indexes
  -match <filter>: Only process files and directories that match the
filter
  -loglevel <name>: Option to set log level; available levels are INFO,
DEBUG (default: INFO)


OUTPUT
In the -l output, the size, space used, and modification time are all
shown in human- readable format. Time is relative to the current time,
so it is time zone independent. For example, "14d1h" means that the
file was modified 14 days and one hour ago. Note: "current time" is the
time XCP started. The timestamp is saved in the index metadata
(catalog:/xFiles/indexes/*.json) and is used for reports against the
index.

The -stats option prints a human-readable report to the console. Other
report format options are -html or -csv. The comma-separated values
(CSV) format has exact values. CSV and HTML reports are automatically
saved in the catalog, if there is one.

The histograms for modified, accessed, and changed only count regular
files.

FILTERS
A filter expression should evaluate to True or False in Python. Filters
are used in XCP for the -match and -exclude options. See below for some
examples of the filters. Use "xcp help <command>" to check which
options are supported for commands.


Variables and file attributes currently available to use in a filter:
modified, accessed, changed: Floats representing age in hours depth,
size, used, uid, gid, type, nlinks, mode, fileid: Integers name, base,
```

ext: Strings (if name is "demo.sql" then base is =="demo" and ext is
==".sql") owner, group: Strings size units: k, m, g, t, p = K, M, G, T,
P = 1024, 1048576, 2**30, 2**40, 2**50 file types: f, d, b, c, l, s, q
= F, D, B, C, L, S, Q = 1, 2, 3, 4, 5, 6, 7

Functions available to use in a filter:
rxm(pattern): Regular expression match for each file name fnm(pattern):
Unix-style wildcard match for each file name load(path): List of lines
from a local (external) file rand(N): Match one out of every N files at
random path(pattern): Wildcard match for the full path
paths(<full_file_path>): Match or exclude all NFS export paths listed
in the file Note: unlike most shell wildcards, pattern "/a/*" will
match path /a/b/c

The rxm() function only runs Python re.compile (pattern) once.
Similarly, load() only reads its file once.


Filter examples:
Match files modified less than half an hour ago "type == f and modified
< .5"

Find anything with "core" in the name ("in" is a Python operator):
"'core' in name"

Same match using regular expressions: "rxm('.*core.*')"


Same match using wildcards: "fnm('*core*')"

Match files that are not regular files, directories, or links: "type
not in (f,d,l)"


Find jpg files over 500 megabytes (M is a variable): "fnm('*.jpg') and
size > 500*M"

Find files with "/demo/smith" in the path (x is the file; str(x) is its
full path): "'/demo/smith' in str(x)"

Exclude copying anything with "f" in its name: "fnm('*f*')"

Exclude multiple export paths specified in "/root/excludePaths.txt".
"paths('/root/excludePaths.txt')"
The file "excludePaths.txt" may contain multiple export paths where
each path is listed on a new line.
The export paths may contain wildcards.

For example, 10.10.1.10:/source_vol/*.txt in file excludePaths.txt will exclude all files having ".txt" extension

If there are incremental changes in previously included directories and you want to exclude anything that has "dir40" as a substring in its name, you can specify the new exclude filter with the sync. This overrides the exclude filter used previously with the copy command and applies the new exclude filter.
Note that if there are incremental changes on the source after the copy operation and there are files with "f" in their name, then these are copied on to the target when the sync operation is performed. If you want to avoid copying such files or directories, you can use the following command: xcp sync -exclude "'f' in name" -id <id>

PERFORMANCE
On Linux, please set the following in /etc/sysctl.conf and run "sysctl -p":

net.core.rmem_default = 1342177
net.core.rmem_max = 16777216
net.core.wmem_default = 1342177
net.core.wmem_max = 16777216
net.ipv4.tcp_rmem = 4096 1342177 16777216
net.ipv4.tcp_wmem = 4096 1342177 16777216
net.core.netdev_max_backlog = 300000
net.ipv4.tcp_fin_timeout = 10

Make sure that your system has multiple CPUs and at least a few gigabytes (GBs) of free memory.

Searching, checksumming or copying hundreds of thousands or millions of files should be many times faster with XCP than with standard tools such cp, find, du, rsync, or OS drag-and-drop.

For the case of a single file, reading or copying with XCP is usually faster with
a faster host CPU. When processing many files, reading or copying is faster with more cores or CPUs.

The main performance throttle option is -parallel for the maximum number of concurrent processes as the number of concurrent directories being read and files being processed. For small numbers of files and/or when there is a network quality of service (QoS) limiter, you might also be able to increase performance by opening multiple channels. The usage section above shows how to use multiple host target addresses. The same syntax also opens more channels to a single target.

```
For example: "host1,host1:/vol/src" makes each XCP process open two
channels to host1. In some WAN environments, this can improve
performance. Within a datacenter, if there are only 1 GbE network
interface cards (NICs) on the host with XCP it usually helps to use the
multipath syntax to leverage more than one NIC.
To verify that you are running I/O over multiple paths, use OS tools to
monitor network I/O. For example, on Linux, try "sar -n DEV 2 200".

ENVIRONMENT VARIABLES
XCP_CONFIG_DIR: Override the default location /opt/NetApp/xFiles/xcp
If set, the value should be an OS filesystem path, possibly a mounted
NFS directory. When XCP_CONFIG_DIR is set, a new directory with name
same as hostname is created inside the custom configuration directory
path wherein new logs will be stored


XCP_LOG_DIR: Override the default, which stores the XCP log in the
configuration directory. If set, the value should be an OS filesystem
path, possibly a mounted NFS directory.
When XCP_LOG_DIR is set, a new directory with name same as hostname is
created inside the custom log directory path wherein new logs will be
stored


XCP_CATALOG_PATH: Override the setting in xcp.ini. If set, the value
should be in the XCP path format, server:export[:subdirectory].


SECURITY
All the files and directories in the catalog are world readable except
for the index files, which have a ".index" suffix and are located in
subdirectories under the top-level catalog "indexes" directory.
Because each index file is essentially an archive of metadata of an
entire file tree, the catalog should be stored on a NetApp volume with
export permissions matching the the actual sources and targets. Note
that file data is not stored in the index, only metadata.

SUPPORT
https://www.netapp.com/us/contact-us/support.aspx
```

## 표시

NFS `show` 명령은 하나 이상의 스토리지 서버의 RPC 서비스와 NFS 내보내기를 쿼리합니다. 또한 이 명령은 사용 가능한 서비스 및 내보내기를 나열하고 각 내보내기의 사용된 용량과 사용 가능한 용량을 표시한 다음 각 내보내기의 루트 속성을 보여 줍니다.

구문

```
xcp show <ip_address_or_host_name>
```

ⓘ 를 클릭합니다 show 명령을 사용하려면 NFSv3 내보낸 시스템의 호스트 이름 또는 IP 주소가
필요합니다.

예제 보기

```
[root@localhost linux]# ./xcp show <IP address or hostname of NFS
server>

getting pmap dump from <IP address or hostname of NFS server> port
111... getting export list from <IP address or hostname of NFS
server>...
sending 3 mounts and 12 nfs requests to <IP address or hostname of NFS
server>...

== RPC Services ==
'<IP address or hostname of NFS server>': UDP rpc services: MNT v1/2/3,
NFS v3, NLM v4, PMAP v2/3/4, STATUS v1
'<IP address or hostname of NFS server>': TCP rpc services: MNT v1/2/3,
NFS v3/4, NLM v4, PMAP v2/3/4, STATUS v1

== NFS Exports == Mounts Errors Server
3    0 <IP address or hostname of NFS server>

Space        Files   Space        Files
Free          Free    Used        Used Export

93.9 MiB    19,886  1.10 MiB     104 <IP address or hostname of NFS
server>:/
9.44 GiB    2.49M   65.7 MiB     276 <IP address or hostname of NFS
server>:/catalog_vol
84.9 GiB    22.4M   593 MiB 115 <IP address or hostname of NFS
server>:/source_vol

== Attributes of NFS Exports ==
drwxr-xr-x --- root root 4KiB 4KiB 6d2h <IP address or hostname of
NFSserver>:/
drwxr-xr-x --- root root 4KiB 4KiB 6d2h <IP address or hostname of NFS
server>:/catalog_vol
drwxr-xr-x --- root root 4KiB 4KiB 1h30m <IP address or hostname of NFS
server>:/source_vol

Xcp command : xcp show <IP address or hostname of NFS server>
0 error
Speed   : 3.62 KiB in (17.9 KiB/s), 6.28 KiB out (31.1 KiB/s) Total
Time : 0s.
STATUS  : PASSED
```

**show-v**

를 사용합니다 `-v` 매개 변수 `show` IP 주소 또는 호스트 이름을 사용하여 NFS 서버에 대한 세부 정보를 반환하는 명령입니다.

구문

```
xcp show -v
```

## 라이센스

NFS `license` Command는 XCP 라이센스 정보를 표시합니다.

이 명령을 실행하기 전에 라이센스 파일이 다운로드되어 에 복사되었는지 확인하십시오 `/opt/NetApp/xFiles/xcp/` xCP Linux 클라이언트 호스트의 디렉토리입니다.

구문

```
xcp license
```

예제 보기

```
[root@localhost /]# ./xcp license

Licensed to "XXX, NetApp Inc, XXX@netapp.com" until Sun Mar 31 00:00:00
2029 License type: SANDBOX
License status: ACTIVE
Customer name: N/A
Project number: N/A
Offline Host: Yes
Send statistics: No
Host activation date: N/A
License management URL: https://xcp.netapp.com
```

라이센스 업데이트

를 사용합니다 `update` 매개 변수 `license` XCP 서버에서 최신 라이센스를 검색하는 명령입니다.

구문

```
xcp license update
```

```
[root@localhost /]# ./xcp license update

XCP <version>; (c) yyyy NetApp, Inc.; Licensed to XXX [NetApp Inc]
until Sun Mar 31 00:00:00 yyyy
```

## 활성화

NFS `activate` 명령을 실행하면 XCP 라이센스가 활성화됩니다.

> ⓘ 이 명령을 실행하기 전에 라이센스 파일이 다운로드되어 에 복사되었는지 확인하십시오 `opt/NetApp/xFiles/xcp/` xCP Linux 클라이언트 호스트의 디렉토리입니다.

구문

```
xcp activate
```

예제 보기

```
[root@localhost linux]# ./xcp activate

XCP activated
```

## 스캔

xCP NFS입니다 `scan` 명령은 전체 소스 NFSv3 내보내기 경로를 재귀적으로 검사하고 파일 구조 통계를 반환합니다.

NetApp은 스캔 작업 중에 소스 NFS 내보내기 마운트를 읽기 전용 모드로 설정할 것을 권장합니다.

구문

```
xcp scan <source_nfs_export_path>
```

예제 보기

```
[root@localhost linux]# ./xcp scan <IP address of NFS server>:/

source_vol
source_vol
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Xcp command : xcp scan <IP address of NFS server>:/source vol
```

다음 표에는 가 나열되어 있습니다 scan 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| scan-l(스캔 - l | 긴 목록 출력 형식으로 파일을 나열합니다. |
| 스캔 - q | 스캔한 파일 수를 표시합니다. |
| 스캔 - 통계 | 트리 통계 보고서 형식으로 파일을 나열합니다. |
| 스캔 - CSV | 트리 통계 CSV 보고서 형식으로 파일을 나열합니다. |
| 스캔 - HTML | 트리 통계 HTML 보고서 형식으로 파일을 나열합니다. |
| 스캔 - 이름 없음 | 파일 목록 및 보고서에서 사용자 및 그룹 이름을 제외합니다. |
| <<nfs_scan_newid,스캔-네위();이름 및 GT; | 새 인덱스의 카탈로그 이름을 지정합니다. |
| <<nfs_scan_id,스캔 ID | 이전 복사본 또는 스캔 인덱스의 카탈로그 이름을 지정합니다. |
| <<nfs_scan_match,스캔 일치();필터(); | 필터와 일치하는 파일 및 디렉터리만 처리합니다. |
| <<nfs_scan_fmt,스캔-FMT | 형식과 일치하는 파일 및 디렉터리만 처리합니다. |

| 매개 변수 | 설명 |
|---|---|
| 스캔 - du | 하위 디렉토리를 포함하여 각 디렉토리의 공간 사용량을 요약합니다. |
| <<nfs_scan_md5,스캔 - MD5 및 lt; string_expression GT; | 파일에 체크섬을 생성하고 인덱싱 시 체크섬을 저장합니다(기본값: false). |
| <<nfs_scan_depth,스캔 깊이();n | 검색 수준을 제한합니다. |
| <<nfs_scan_dircount,스캔 디렉토리 수(); n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다. |
| 스캔 후 중복 제거 | 보고서에 중복 제거 추정치를 포함합니다. |
| <<nfs_scan_bs,스캔 - BS n[k] | 를 사용하여 데이터를 읽는 스캔의 읽기/쓰기 블록 크기를 지정합니다 `-md5` 또는 `-edupe` (기본값: 64k). |
| <<nfs_scan_parallel,스캔 - 병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |
| 스캔 안됨 | 기본 인덱스를 만들지 않습니다(기본값: false). |
| scan-subdir-names 를 참조하십시오 | 디렉터리에서 최상위 하위 디렉터리의 이름을 검색합니다. |
| [스캔-보존-atime] | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |
| <←s3.insecure 를 스캔합니다>> | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| <<nfs_scan_endpoint,scan-s3.endpoint | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<nfs_scan_s3_profile,-s3.profile 스캔();PROFILE_NAME | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| <←s3.noverify 를 스캔합니다>> | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

**scan-l(스캔 - l**

를 사용합니다 `-l` 매개 변수 `scan` 긴 목록 출력 형식으로 파일을 나열하는 명령입니다.

구문

```
xcp scan -l <ip_address_or_hostname>:/source_vol
```

예제 보기

```
root@localhost linux]# ./xcp scan -l <IP address or hostname of
NFSserver>:/source_vol

drwxr-xr-x --- root root 4KiB 4KiB 6s source_vol
drwxr-xr-x --- root root 4KiB 4KiB 42s source_vol/USER.1
drwxr-xr-x --- root root 4KiB 4KiB 42s source_vol/USER.2
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.1/FILE_1
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.1/FILE_2
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.1/FILE_3
rw-r--r-- --- root root 1KiB 4KiB 42ssource_vol/USER.1/FILE_4
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.1/FILE_5
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.2/FILE_1
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.2/FILE_5
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.2/FILE_2
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.2/FILE_3
rw-r--r-- --- root root 1KiB 4KiB 42s source_vol/USER.2/FILE_4
Xcp command : xcp scan -l <IP address or hostname of NFS
server>:/source_vol
13 scanned, 0 matched, 0 error
Speed : 3.73 KiB in (4.89 KiB/s), 756 out (989/s)
Total Time : 0s.
STATUS : PASSED
```

## 스캔 - q

를 사용합니다 -q 매개 변수 scan 명령을 사용하여 스캔한 파일 수를 표시합니다.

구문

```
xcp scan -q <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -q <IP address or hostname of
NFSserver>:/source_vol

Xcp command : xcp scan -q <IP address or hostname of NFS
server>:/source_vol
13 scanned, 0 matched, 0 error
Speed : 3.73 KiB in (3.96 KiB/s), 756 out(801/s)
Total Time : 0s.
STATUS : PASSED
```

**scan-stats, scan-csv 및 scan-html**

를 사용합니다 `-stats`, `-csv`, 및 `-html` 매개 변수 및 `scan` 트리 통계 보고서 형식으로 파일을 나열하는 명령입니다.

> ⓘ XCP 보고서(.csv, .html)는 에 지정된 카탈로그 위치에 저장됩니다 `xcp.ini` 파일. 파일은 에
> 저장됩니다 `<catalog path>/catalog/indexes/1/reports` 폴더. 부록에서 샘플 보고서를 볼
> 수 있습니다.

구문

```
xcp scan -stats <ip_address>:/source_vol
```

## 예제 보기

```
root@client1 linux]# ./xcp scan -stats <ip_address>:/fg1

Job ID: Job_2023-11-23_23.23.33.930501_scan
== Maximum Values ==
Size Used Depth File Path Namelen Dirsize
50.4 MiB 50.6 MiB 1 24 20 33
== Average Values ==
Size Depth Namelen Dirsize
15.3 MiB 0 6 33
== Top Space Users ==
root
107 MiB
== Top File Owners ==
root
34
== Top File Extensions ==
.sh .out .py .sh1 other
8 2 2 1 20
16.0 KiB 3.09 MiB 448 1.48 KiB 502 MiB
== Number of files ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
20 1 2 10
== Space used ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
76 KiB 12 KiB 5.16 MiB 102 MiB
== Directory entries ==
empty 1-10 10-100 100-1K 1K-10K >10K

== Depth ==
0-5 6-10 11-15 16-20 21-100 >100
34
== Accessed ==
>1 year9-12 months 6-9 months 3-6 months 1-3 months 1-31 days 1-24 hrs
<1 hour <15 mins
future
33
505 MiB
== Modified ==
>1 year9-12 months 6-9 months 3-6 months 1-3 months 1-31 days 1-24 hrs
<1 hour <15 mins
future
16
17
400 MiB 105
```

```
MiB
== Changed ==
>1 year9-12 months 6-9 months 3-6 months 1-3 months 1-31 days 1-24 hrs
<1 hour <15 mins
future
16
17
400 MiB 105
MiB
== Path ==
0-1024 >1024
33
Total count: 34
Directories: 1
Regular files: 33
Symbolic links: None
Special files: None
Hard links: None
Multilink files: None
Space Saved by Hard links (KB): 0
Sparse data: N/A
Dedupe estimate: N/A
Total space for regular files: size: 505 MiB, used: 107 MiB
Total space for symlinks: size: 0, used: 0
Total space for directories: size: 8 KiB, used: 8 KiB
Total space used: 107 MiB
Xcp command : xcp scan -stats <ip_address>:/fg1
Stats : 34 scanned
Speed : 6.35 KiB in (7.23 KiB/s), 444 out (506/s)
Total Time : 0s.
Job ID : Job_2023-11-23_23.23.33.930501_scan
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/
Job_2023-11-23_23.23.33.930501_scan.log

STATUS : PASSED
[root@client 1 linux]#
```

구문

```
xcp scan -csv <ip_address_or_hostname>:/source_vol
```

예제 보기

```
root@localhost linux]# ./xcp scan -csv <IP address or hostname of NFS
server>:/source_vol

scan <IP address or hostname of NFS server>:/source_vol
options,"{'-csv': True}"
summary,"13 scanned, 3.73 KiB in (11.3 KiB/s), 756 out (2.23 KiB/s),
0s."
Maximum Values,Size,Used,Depth,Namelen,Dirsize
Maximum Values,1024,4096,2,10,5
Average Values,Namelen,Size,Depth,Dirsize
Average Values,6,1024,1,4
Top Space Users,root
Top Space Users,53248
Top File Owners,root
Top File Owners,13
Top File Extensions,other
Top File Extensions,10
Number of files,empty,<8KiB,8-64KiB,64KiB-1MiB,1-10MiB,10-
100MiB,>100MiB
Number of files,0,10,0,0,0,0,0
Space used,empty,<8KiB,8-64KiB,64KiB-1MiB,1-10MiB,10-100MiB,>100MiB
Space used,0,40960,0,0,0,0,0
Directory entries,empty,1-10,10-100,100-1K,1K-10K,>10K
Directory entries,0,3,0,0,0,0
Depth,0-5,6-10,11-15,16-20,21-100,>100
Depth,13,0,0,0,0,0
Accessed,>1 year,>1 month,1-31 days,1-24 hrs,<1 hour,<15 mins,future
Accessed,0,0,0,0,0,10,0
Modified,>1 year,>1 month,1-31 days,1-24 hrs,<1 hour,<15 mins,future
Modified,0,0,0,0,0,10,0
Changed,>1 year,>1 month,1-31 days,1-24 hrs,<1 hour,<15 mins,future
Changed,0,0,0,0,0,10,0

Total count,13
Directories,3
Regular files,10
Symbolic links,0
Special files,0
Hard links,0,
multilink files,0,
Space Saved by Hard links (KB),0
Sparse data,N/A
Dedupe estimate,N/A
Total space for regular files,size,10240,used,40960
```

```
Total space for symlinks,size,0,used,0
Total space for directories,size,12288,used,12288
Total space used,53248
Xcp command : xcp scan -csv <IP address or hostname of NFS
server>:/source_vol
13 scanned, 0 matched, 0 error
Speed : 3.73 KiB in (11.2 KiB/s), 756 out (2.22 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**구문**

```
xcp scan -html <ip_address_or_hostname>:/source_vol
```

**예제 보기**

```
root@localhost linux]# ./xcp scan -html <IP address or hostname of NFS
server>:/source_vol

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML
4.01//EN""http://www.w3.org/TR/html4/strict.dtd">
<html><head>
[redacted HTML contents]
</body></html>
Xcp command : xcp scan -html <IP address or hostname of
NFSserver>:/source_vol
13 scanned, 0 matched, 0 error
Speed : 3.73 KiB in (4.31 KiB/s), 756 out(873/s)
Total Time : 0s.
STATUS : PASSED
[root@localhost source_vol]#
```

**스캔 - 이름 없음**

를 사용합니다 `-nonames` 매개 변수 `scan` 파일 목록 또는 보고서에서 사용자 및 그룹 이름을 제외하는 명령입니다.

> ⓘ 와 함께 사용할 경우 `scan` 명령, 입니다 `-nonames` 매개 변수는 을 사용하여 반환된 파일 목록에만
> 적용됩니다 `-l` 옵션을 선택합니다.

**구문**

```
xcp scan -nonames <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -nonames <IP address or hostname of
NFS server>:/source_vol

source_vol
source_vol/USER.1
source_vol/USER.2
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Xcp command : xcp scan -nonames <IP address or hostname of
NFSserver>:/source_vol
13 scanned, 0 matched, 0 error
Speed : 3.73 KiB in (4.66 KiB/s), 756 out(944/s)
Total Time : 0s.
STATUS : PASSED
```

스캔-네위드 **<name>**

를 사용합니다 `-newid <name>` 매개 변수 `scan` 검사를 실행할 때 새 인덱스에 대한 카탈로그 이름을 지정하는 명령입니다.

구문

```
xcp scan -newid <name> <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -newid ID001 <IP address or hostname
of NFS server>:/source_vol

Xcp command : xcp scan -newid ID001 <IP address or hostname of NFS
server>:/source_vol
13 scanned, 0 matched, 0 error
Speed : 13.8 KiB in (17.7 KiB/s), 53.1 KiB out (68.0 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 스캔 ID <catalog_name>

를 사용합니다 `-id` 매개 변수 `scan` 이전 복사본 또는 스캔 인덱스의 카탈로그 이름을 지정하는 명령입니다.

구문

```
xcp scan -id <catalog_name>
```

예제 보기

```
[root@localhost linux]# ./xcp scan -id 3

xcp: Index: {source: 10.10.1.10:/vol/ex_s01/etc/keymgr, target: None}
keymgr/root/cacert.pem
keymgr/cert/secureadmin.pem
keymgr/key/secureadmin.pem
keymgr/csr/secureadmin.pem
keymgr/root
keymgr/csr
keymgr/key
keymgr/cert
keymgr
9 reviewed, 11.4 KiB in (11.7 KiB/s), 1.33 KiB out (1.37 KiB/s), 0s.
```

## 스캔 - 일치 <filter>

를 사용합니다 `-match <filter>` 매개 변수 `scan` 필터와 일치하는 파일 및 디렉토리만 처리되도록 지정하는 명령입니다.

구문

```
xcp scan -match <filter> <ip_address_or_hostname>:/source_vol
```

예제 보기

```
root@localhost linux]# ./xcp scan -match bin <IP address or hostname of
NFS server>:/source_vol

source_vol
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Filtered: 0 did not match
Xcp command : xcp scan -match bin <IP address or hostname of
NFSserver>:/source_vol
18 scanned, 18 matched, 0 error
Speed : 4.59 KiB in (6.94 KiB/s), 756 out (1.12KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**스캔 - FMT <string_expression>**

를 사용합니다 `-fmt` 매개 변수 `scan` 지정된 형식과 일치하는 파일 및 디렉터리만 반환되도록 지정하는 명령입니다.

구문

```
xcp scan -fmt <string_expression> <ip_address_or_hostname>:/source_vol
```

```
[root@localhost linux]# ./xcp scan -fmt "'{}, {}, {}, {},
{}'.format(name, x, ctime, atime, mtime)"
<IP address or hostname of NFS server>:/source_vol

source_vol, <IP address or hostname of NFS server>:/source_vol,
1583294484.46, 1583294492.63,
1583294484.46
ILE_1, <IP address or hostname of NFS
server>:/source_vol/USER.1/FILE_1, 1583293637.88,
1583293637.83, 1583293637.83
FILE_2, <IP address or hostname of NFS
server>:/source_vol/USER.1/FILE_2, 1583293637.88,
1583293637.83, 1583293637.84
FILE_3, <IP address or hostname of NFS
server>:/source_vol/USER.1/FILE_3, 1583293637.88,
1583293637.84, 1583293637.84
FILE_4, <IP address or hostname of NFS
server>:/source_vol/USER.1/FILE_4, 1583293637.88,
1583293637.84, 1583293637.84
FILE_5, <IP address or hostname of NFS
server>:/source_vol/USER.1/FILE_5, 1583293637.88,
1583293637.84, 1583293637.84
file1.txt, <IP address or hostname of NFS
server>:/source_vol/USER.1/file1.txt, 1583294284.78,
1583294284.78, 1583294284.78
file2.txt, <IP address or hostname of NFS
server>:/source_vol/USER.1/file2.txt, 1583294284.78,
1583294284.78, 1583294284.78
logfile.txt, <IP address or hostname of NFS
server>:/source_vol/USER.1/logfile.txt,
1583294295.79, 1583294295.79, 1583294295.79
log1.txt, <IP address or hostname of NFS
server>:/source_vol/USER.1/log1.txt, 1583294295.8,
1583294295.8, 1583294295.8
r1.txt, <IP address or hostname of NFS server>:/source_vol/r1.txt,
1583294484.46, 1583294484.45,
1583294484.45
USER.1, <IP address or hostname of NFS server>:/source_vol/USER.1,
1583294295.8, 1583294492.63,
1583294295.8
USER.2, <IP address or hostname of NFS server>:/source_vol/USER.2,
1583293637.95, 1583294492.63,
1583293637.95
```

```
FILE_1, <IP address or hostname of NFS
server>:/source_vol/USER.2/FILE_1, 1583293637.95,
1583293637.94, 1583293637.94
FILE_5, <IP address or hostname of NFS
server>:/source_vol/USER.2/FILE_5, 1583293637.96,
1583293637.94, 1583293637.94
FILE_2, <IP address or hostname of NFS
server>:/source_vol/USER.2/FILE_2, 1583293637.96,
1583293637.95, 1583293637.95
FILE_3, <IP address or hostname of NFS
server>:/source_vol/USER.2/FILE_3, 1583293637.96,
1583293637.95, 1583293637.95
FILE_4, <IP address or hostname of NFS
server>:/source_vol/USER.2/FILE_4, 1583293637.96,
1583293637.95, 1583293637.96
Xcp command : xcp scan -fmt '{}, {}, {}, {}, {}'.format(name, x, ctime,
atime, mtime) <IP address
or hostname of NFS server>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 4.59 KiB in (4.14 KiB/s), 756 out (683/s)
Total Time : 1s.
STATUS : PASSED
```

**스캔 - du**

를 사용합니다 `-du` 매개 변수 `scan` 하위 디렉토리를 포함하여 각 디렉토리의 공간 사용량을 요약하는 명령입니다.

구문

```
xcp scan -du <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -du <IP address or hostname of
NFSserver>:/source_vol

24KiB source_vol/USER.1
24KiB source_vol/USER.2
52KiB source_vol
Xcp command : xcp scan -du <IP address or hostname of
NFSserver>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 4.59 KiB in (12.9 KiB/s), 756 out (2.07KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 스캔 - MD5 <string_expression>

를 사용합니다 -md5 매개 변수 scan 인덱싱할 때 파일 목록에 대한 체크섬을 생성하고 체크섬을 저장하는 명령입니다. 기본값은 false 로 설정되어 있습니다.

ⓘ  체크섬은 파일 검증에 사용되지 않으며 스캔 작업 중에 파일 목록에만 사용됩니다.

구문

```
xcp scan -md5 <ip_address_or_hostname>:/source_vol
```

예제 보기

```
root@localhost linux]# ./xcp scan -md5 <IP address or hostname of
NFSserver>:/source_vol

source_vol
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.1/FILE_1
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.1/FILE_2
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.1/FILE_3
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.1/FILE_4
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.1/FILE_5
d41d8cd98f00b204e9800998ecf8427e source_vol/USER.1/file1.txt
d41d8cd98f00b204e9800998ecf8427e source_vol/USER.1/file2.txt
d41d8cd98f00b204e9800998ecf8427esource_vol/USER.1/logfile.txt
d41d8cd98f00b204e9800998ecf8427e source_vol/USER.1/log1.txt
e894f2344aaa92289fb57bc8f597ffa9 source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.2/FILE_1
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.2/FILE_5
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.2/FILE_2
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.2/FILE_3
d47b127bc2de2d687ddc82dac354c415 source_vol/USER.2/FILE_4
Xcp command : xcp scan -md5 <IP address or hostname of NFS
server>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 16.0 KiB in (34.5 KiB/s), 2.29 KiB out (4.92 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

스캔 깊이 **<n>**

를 사용합니다 -depth <n> 매개 변수 scan 스캔의 검색 깊이를 제한하는 명령입니다. 를 클릭합니다 -depth <n>
매개 변수는 XCP가 파일을 스캔할 수 있는 하위 디렉터리의 깊이를 지정합니다. 예를 들어, 숫자 2가 지정된 경우
XCP는 처음 두 개의 하위 디렉터리 수준만 검색합니다.

구문

```
xcp scan -depth <n> <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -depth 2 <IP address or hostname of
NFS server>:/source_vol

source_vol
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Xcp command : xcp scan -depth 2 <IP address or hostname of
NFSserver>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 4.59 KiB in (6.94 KiB/s), 756 out (1.12KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 스캔 - dircount <n[k]>

를 사용합니다 -dircount <n[k]> 매개 변수 scan 스캔에서 디렉토리를 읽을 때 요청 크기를 지정하는 명령입니다.
기본값은 64k입니다.

구문

```
xcp scan -dircount <n[k]> <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -dircount 64k <IP address or
hostname of NFS server>:/source_vol

source_vol
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
```

## 스캔 후 중복 제거

를 사용합니다 `-edupe` 매개 변수 `scan` 보고서에 중복 제거 추정치를 포함하기 위한 명령입니다.

> ⓘ  S3(Simple Storage Service)는 분할 파일을 지원하지 않습니다. 따라서 S3 버킷을 의 타겟 대상으로
> 지정합니다 `scan -edupe` 희소 데이터에 대한 값 "None"을 반환합니다.

구문

```
xcp scan -edupe <ip_address_or_hostname>:/source_vol
```

**예제 보기**

```
root@localhost linux]# ./xcp scan -edupe <IP address or hostname of
NFSserver>:/source_vol

== Maximum Values ==
Size Used Depth Namelen Dirsize
1 KiB 4 KiB 2 11 9
== Average Values ==
Namelen Size Depth Dirsize
6 682 1 5
== Top Space Users ==
root
52 KiB
== Top File Owners ==
root
18
== Top File Extensions ==
.txt other
5 10
== Number of files ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
    4 11
== Space used ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
40 KiB
== Directory entries ==
empty 1-10 10-100 100-1K 1K-10K >10K
3
== Depth ==
0-5 6-10 11-15 16-20 21-100 >100
18
== Accessed ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour
4
<15 mins
11
future
== Modified ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
15
== Changed ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
                                           15
Total count: 18
```

```
    Directories: 3
    Regular files: 15
    Symbolic links: None
    Special files: None
    Hard links: None,
    multilink files: None,
    Space Saved by Hard links (KB): 0
    Sparse data: None
    Dedupe estimate: N/A
    Total space for regular files: size: 10.0 KiB, used: 40 KiB
    Total space for symlinks: size: 0, used: 0
    Total space for directories: size: 12 KiB, used: 12 KiB
    Total space used: 52 KiB
    Xcp command : xcp scan -edupe <IP address or hostname of
    NFSserver>:/source_vol
    18 scanned, 0 matched, 0 error
    Speed : 16.0 KiB in (52.7 KiB/s), 2.29 KiB out (7.52 KiB/s)
    Total Time : 0s.
    STATUS : PASSED
```

**스캔 - BS <n[k]>**

를 사용합니다 `-bs <n[k]>` 매개 변수 `scan` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 이는 를 사용하여 데이터를 읽는 스캔에 적용됩니다 `-md5` 또는 `-edupe` 매개 변수. 기본 블록 크기는 64K입니다.

구문

```
xcp scan -bs <n[k]> <ip_address_or_hostname>:/source_vol
```

**예제 보기**

```
[root@localhost linux]# ./xcp scan -bs 32 <IP address or hostname of
NFS server>:/source_vol

source_vol
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Xcp command : xcp scan -bs 32 <IP address or hostname of
NFSserver>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 4.59 KiB in (19.0 KiB/s), 756 out (3.06KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**스캔 병렬 <n>**

를 사용합니다 -parallel 매개 변수 scan 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은 7입니다.

**구문**

```
xcp scan -parallel <n> <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -parallel 5 <IP address or hostname
of NFS server>:/source_vol

source_vol
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Xcp command : xcp scan -parallel 5 <IP address or hostname of NFS
server>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 4.59 KiB in (7.36 KiB/s), 756 out (1.19 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 스캔 안됨

를 사용합니다 -noId 매개 변수 scan 기본 인덱스 생성을 사용하지 않도록 설정하는 명령입니다. 기본값은 false
입니다.

구문

```
xcp scan -noId <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -noId <IP address or hostname of NFS
server>:/source_vol

source_vol
source_vol/USER.1/FILE_1
source_vol/USER.1/FILE_2
source_vol/USER.1/FILE_3
source_vol/USER.1/FILE_4
source_vol/USER.1/FILE_5
source_vol/USER.1/file1.txt
source_vol/USER.1/file2.txt
source_vol/USER.1/logfile.txt
source_vol/USER.1/log1.txt
source_vol/r1.txt
source_vol/USER.1
source_vol/USER.2
source_vol/USER.2/FILE_1
source_vol/USER.2/FILE_5
source_vol/USER.2/FILE_2
source_vol/USER.2/FILE_3
source_vol/USER.2/FILE_4
Xcp command : xcp scan -noId <IP address or hostname of
NFSserver>:/source_vol
18 scanned, 0 matched, 0 error
Speed : 4.59 KiB in (5.84 KiB/s), 756 out(963/s)
Total Time : 0s.
STATUS : PASSED
```

**scan-subdir-names** 를 참조하십시오

를 사용합니다 `-subdir-names` 매개 변수 `scan` 디렉터리에서 최상위 하위 디렉터리의 이름을 검색하는 명령입니다.

구문

```
xcp scan -subdir-names <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@localhost linux]# ./xcp scan -subdir-names <IP address or
hostname of NFS server>:/source_vol

source_vol
Xcp command : xcp scan -subdir-names <IP address or hostname of NFS
server>:/source_vol
7 scanned, 0 matched, 0 error
Speed : 1.30 KiB in (1.21 KiB/s), 444 out(414/s)
Total Time : 1s.
STATUS : PASSED
```

**스캔-보존-atime**

를 사용합니다 `-preserve-atime` 매개 변수 `scan` 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복구하는 명령입니다.

NFS 공유가 검색되면 스토리지 시스템이 읽기 시 액세스 시간을 수정하도록 구성된 경우 파일에 대한 액세스 시간이 수정됩니다. XCP는 액세스 시간을 직접 변경하지 않습니다. XCP는 파일을 하나씩 읽고 액세스 시간에 대한 업데이트를 트리거합니다. 를 클릭합니다 `-preserve-atime` 옵션은 액세스 시간을 XCP 읽기 작업 전에 설정된 원래 값으로 재설정합니다.

구문

```
xcp scan -preserve-atime <ip_address_or_hostname>:/source_vol
```

예제 보기

```
[root@client 1 linux]# ./xcp scan -preserve-atime
101.10.10.10:/source_vol

xcp: Job ID: Job_2022-06-30_14.14.15.334173_scan
source_vol/USER2/DIR1_4/FILE_DIR1_4_1024_1
source_vol/USER2/DIR1_4/FILE_DIR1_4_13926_4
source_vol/USER2/DIR1_4/FILE_DIR1_4_65536_2
source_vol/USER2/DIR1_4/FILE_DIR1_4_7475_3
source_vol/USER2/DIR1_4/FILE_DIR1_4_20377_5
source_vol/USER2/DIR1_4/FILE_DIR1_4_26828_6
source_vol/USER2/DIR1_4/FILE_DIR1_4_33279_7
source_vol/USER2/DIR1_4/FILE_DIR1_4_39730_8
source_vol/USER1
source_vol/USER2
source_vol/USER1/FILE_USER1_1024_1
source_vol/USER1/FILE_USER1_65536_2
source_vol/USER1/FILE_USER1_7475_3
source_vol/USER1/FILE_USER1_13926_4
source_vol/USER1/FILE_USER1_20377_5
source_vol/USER1/FILE_USER1_26828_6
source_vol/USER1/FILE_USER1_33279_7
source_vol/USER1/FILE_USER1_39730_8
source_vol/USER1/DIR1_2
source_vol/USER1/DIR1_3
source_vol/USER2/FILE_USER2_1024_1
source_vol/USER2/FILE_USER2_65536_2
source_vol/USER2/FILE_USER2_7475_3
source_vol/USER2/FILE_USER2_13926_4
source_vol/USER2/FILE_USER2_20377_5
source_vol/USER2/FILE_USER2_26828_6
source_vol/USER2/FILE_USER2_33279_7
source_vol/USER2/FILE_USER2_39730_8
source_vol/USER2/DIR1_3
source_vol/USER2/DIR1_4
source_vol/USER1/DIR1_2/FILE_DIR1_2_1024_1
source_vol/USER1/DIR1_2/FILE_DIR1_2_7475_3
source_vol/USER1/DIR1_2/FILE_DIR1_2_33279_7
source_vol/USER1/DIR1_2/FILE_DIR1_2_26828_6
source_vol/USER1/DIR1_2/FILE_DIR1_2_65536_2
source_vol/USER1/DIR1_2/FILE_DIR1_2_39730_8
source_vol/USER1/DIR1_2/FILE_DIR1_2_13926_4
source_vol/USER1/DIR1_2/FILE_DIR1_2_20377_5
source_vol/USER1/DIR1_3/FILE_DIR1_3_1024_1
```

```
source_vol/USER1/DIR1_3/FILE_DIR1_3_7475_3
source_vol/USER1/DIR1_3/FILE_DIR1_3_65536_2
source_vol/USER1/DIR1_3/FILE_DIR1_3_13926_4
source_vol/USER1/DIR1_3/FILE_DIR1_3_20377_5
source_vol/USER1/DIR1_3/FILE_DIR1_3_26828_6
source_vol/USER1/DIR1_3/FILE_DIR1_3_33279_7
source_vol/USER1/DIR1_3/FILE_DIR1_3_39730_8
source_vol/USER2/DIR1_3/FILE_DIR1_3_1024_1
source_vol/USER2/DIR1_3/FILE_DIR1_3_65536_2
source_vol/USER2/DIR1_3/FILE_DIR1_3_7475_3
source_vol/USER2/DIR1_3/FILE_DIR1_3_13926_4
source_vol/USER2/DIR1_3/FILE_DIR1_3_20377_5
source_vol/USER2/DIR1_3/FILE_DIR1_3_26828_6
source_vol/USER2/DIR1_3/FILE_DIR1_3_33279_7
source_vol/USER2/DIR1_3/FILE_DIR1_3_39730_8
source_vol
Xcp command : xcp scan -preserve-atime 101.10.10.10:/source_vol
Stats : 55 scanned
Speed : 14.1 KiB in (21.2 KiB/s), 2.33 KiB out (3.51 KiB/s)
Total Time : 0s.
Job ID : Job_2022-06-30_14.14.15.334173_scan
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2022-06-
30_14.14.15.334173_scan.log
STATUS : PASSED
```

**-s3.insecure 를 스캔합니다**

를 사용합니다 `-s3.insecure` 매개 변수 `scan` S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 명령

구문

```
xcp scan -s3.insecure s3://<bucket_name>
```

예제 보기

```
[root@client1 linux]# ./xcp scan -s3.insecure s3://bucket1

Job ID: Job_2023-06-08_08.16.31.345201_scan
file5g_1
USER1/FILE_USER1_1024_1
USER1/FILE_USER1_1024_2
USER1/FILE_USER1_1024_3
USER1/FILE_USER1_1024_4
USER1/FILE_USER1_1024_5
Xcp command : xcp scan -s3.insecure s3:// -bucket1
Stats : 8 scanned, 6 s3.objects
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 2s.
Job ID : Job_2023-06-08_08.16.31.345201_scan
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_08.16.31.345201_scan.log
STATUS : PASSED
```

**스캔 - S3.엔드포인트 <s3_endpoint_url>**

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수 scan S3 버킷 통신을 위해 지정된 URL로 기본 AWS 끝점 URL을 재정의하는 명령입니다.

구문

```
xcp scan -s3.endpoint https://<endpoint_url>: s3://<bucket_name>
```

예제 보기

```
[root@client1 linux]# ./xcp scan -s3.endpoint https://<endpoint_url>:
s3://xcp-testing

Job ID: Job_2023-06-13_11.23.06.029137_scan
aws_files/USER1/FILE_USER1_1024_1
aws_files/USER1/FILE_USER1_1024_2
aws_files/USER1/FILE_USER1_1024_3
aws_files/USER1/FILE_USER1_1024_4
aws_files/USER1/FILE_USER1_1024_5
Xcp command : xcp scan -s3.endpoint https://<endpoint_url>: s3://xcp-
testing
Stats : 8 scanned, 5 s3.objects
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 0s.
Job ID : Job_2023-06-13_11.23.06.029137_scan
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_11.23.06.029137_scan.log
STATUS : PASSED
```

**-s3.profile <name>**를 스캔합니다

를 사용합니다 `s3.profile` 매개 변수 `scan` S3 버킷 통신에 사용할 AWS 자격 증명 파일에서 프로필을 지정하는 명령

구문

```
xcp scan -s3.profile <name> -s3.endpoint https://<endpoint_url>:
s3://<bucket_name>
```

예제 보기

```
[root@client1 linux]# ./xcp scan -s3.profile sg -s3.endpoint
https://<endpoint_url>:
s3://bucket1

Job ID: Job_2023-06-08_08.47.11.963479_scan
1 scanned, 0 in (0/s), 0 out (0/s), 5s
USER1/FILE_USER1_1024_1
USER1/FILE_USER1_1024_2
USER1/FILE_USER1_1024_3
USER1/FILE_USER1_1024_4
USER1/FILE_USER1_1024_5
Xcp command : xcp scan -s3.profile sg -s3.endpoint
https://<endpoint_url>: s3://bucket1
Stats : 7 scanned, 5 s3.objects
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 6s.
Job ID : Job_2023-06-08_08.47.11.963479_scan
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_08.47.11.963479_scan.log
STATUS : PASSED
[root@client1 linux]#
```

**-s3.noverify** 를 스캔합니다

를 사용합니다 `-s3.noverify` 매개 변수 `scan` S3 버킷 통신에 대한 SSL 인증의 기본 검증을 재정의하는 명령입니다.

구문

```
xcp scan -s3.noverify s3://<bucket_name>
```

예제 보기

```
root@client1 linux]# ./xcp scan -s3.noverify s3:// bucket1

Job ID: Job_2023-06-13_11.00.59.742237_scan
aws_files/USER1/FILE_USER1_1024_1
aws_files/USER1/FILE_USER1_1024_2
aws_files/USER1/FILE_USER1_1024_3
aws_files/USER1/FILE_USER1_1024_4
aws_files/USER1/FILE_USER1_1024_5
Xcp command : xcp scan -s3.noverify s3://bucket1
Stats : 8 scanned, 5 s3.objects
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 2s.
Job ID : Job_2023-06-13_11.00.59.742237_scan
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_11.00.59.742237_scan.log
STATUS : PASSED
```

## 복사

xCP NFS입니다 copy 명령은 전체 소스 디렉토리 구조를 검색하여 대상 NFSv3 내보내기로 복사합니다.

를 클릭합니다 copy 명령을 실행하려면 소스 및 대상 경로가 변수로 필요합니다. 스캔 및 복사된 파일, 처리량, 속도 및 경과 시간 세부 정보가 복사 작업 종료 시 표시됩니다.

> ⓘ
> - 런타임 로그 파일은 에 있습니다 /opt/NetApp/xFiles/xcp/xcp.log 이 경로는 구성할 수 있습니다. 각 명령이 실행된 후 카탈로그에 추가 로깅이 있습니다.
> - 소스가 7-Mode 시스템인 경우 스냅샷 복사본을 소스로 사용할 수 있습니다. 예를 들면 다음과 같습니다. <ip_address>:/vol/ex_s01/.snapshot/<snapshot_name>

구문

```
xcp copy <source_nfs_export_path> <destination_nfs_export_path>
```

예제 보기

```
root@localhost linux]# ./xcp copy <IP address of NFS
server>:/source_vol < IP address of
destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.46.33.153705
Xcp command : xcp copy <IP address of NFS server>:/source_vol <IP
address of destination NFS
server>:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 38.9 KiB in (51.2 KiB/s), 81.2 KiB out (107KiB/s)
Total Time : 0s.
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 copy 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| 카피 - 이름 없음 | 파일 목록 및 보고서에서 사용자 및 그룹 이름을 제외합니다. |
| <<copy_match,복사-일치();필터(); | 필터와 일치하는 파일 및 디렉터리만 처리합니다. |
| <<copy_md5,copy-md5 | 파일에 체크섬을 생성하고 인덱싱 시 체크섬을 저장합니다(기본값: false). |
| <<copy_dircount,복사 디렉토리 수(); n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다. |
| 복사-중복 제거 | 보고서에 중복 제거 추정치를 포함합니다. |
| <<copy_bs,복사 - BS n[k] | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<copy_parallel,복사-병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |
| copy-preserve-atime 을 선택합니다 | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |
| -s3.insecure 을 복사합니다 | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| <<copy_s3_endpoint,copy-s3.endpoint를 누릅니다 | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<copy_s3_profile,-s3.profile lt;profile_name을 복사합니다()를 누릅니다 | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| -s3.noverify 을 복사합니다 | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

## 카피 - 이름 없음

를 사용합니다 `-nonames` 매개 변수 `copy` 파일 목록 또는 보고서에서 사용자 및 그룹 이름을 제외하는 명령입니다.

구문

```
xcp copy -nonames <source_ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp copy -nonames <IP address or hostname of
NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.48.48.147261
Xcp command : xcp copy -nonames <IP address or hostname of NFS
server>:/source_vol <IP address of
destination NFS server>:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 38.9 KiB in (53.5 KiB/s), 81.3 KiB out (112 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## **<filter>**를 복사합니다

를 사용합니다 `-match <filter>` 매개 변수 `copy` 필터와 일치하는 파일 및 디렉토리만 처리되도록 지정하는 명령입니다.

구문

```
xcp copy -match <filter> <source_ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp copy -match bin <IP address or hostname
of NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
04_00.00.07.125990
Xcp command : xcp copy -match bin <IP address or hostname of NFS
server>:/source_vol <IP address
of destination NFS server>:/dest_vol
18 scanned, 18 matched, 17 copied, 0 error
Speed : 39.1 KiB in (52.6 KiB/s), 81.7 KiB out (110 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**Copy-MD5 <string_expression>(MD5 복사)**

를 사용합니다 `-md5` 매개 변수 `copy` 인덱싱할 때 파일 목록에 대한 체크섬을 생성하고 체크섬을 저장하는 명령입니다. 기본값은 false 로 설정되어 있습니다.

구문

```
xcp copy -md5 <source_ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp copy -md5 <IP address or hostname of NFS
server>:/source_vol <IP
address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.47.41.137615
Xcp command : xcp copy -md5 <IP address or hostname of NFS
server>:/source_vol <IP address of
destination NFS server>:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 38.9 KiB in (52.1 KiB/s), 81.3 KiB out (109 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**Copy-dircount <n[k]> 를 참조하십시오**

를 사용합니다 `-dircount <n[k]>` 매개 변수 `copy` 명령을 사용하여 디렉토리를 읽을 때 요청 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp copy -dircount <n[k]> <source_ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

```
[root@localhost linux]# ./xcp copy -dircount 32k <IP address or
hostname of NFS server>:/source_vol
<IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.58.01.094460
Xcp command : xcp copy -dircount 32k <IP address or hostname of NFS
server>:/source_vol <IP
address of destination NFS server >:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 39.1 KiB in (56.7 KiB/s), 81.6 KiB out (119 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 복사-중복 제거

를 사용합니다 `-edupe` 매개 변수 `copy` 보고서에 중복 제거 추정치를 포함하기 위한 명령입니다.

> ⓘ  S3(Simple Storage Service)는 분할 파일을 지원하지 않습니다. 따라서 S3 버킷을 의 타겟 대상으로 지정합니다 `copy -edupe` 희소 데이터에 대한 값 "None"을 반환합니다.

## 구문

```
xcp copy -edupe <source_ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp copy -edupe <IP address or hostname of
NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.48.10.436325
== Maximum Values ==
Size Used Depth Namelen Dirsize
1 KiB 4 KiB 2 11 9
== Average Values ==
Namelen Size Depth Dirsize
6 682 1 5
== Top Space Users ==
root
52 KiB
== Top File Owners ==
root
18
== Top File Extensions ==
.txt other
5 10
== Number of files ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
4 11
== Space used ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
40 KiB
== Directory entries ==
empty 1-10
3
10-100 100-1K 1K-10K >10K
== Depth ==
0-5 6-10 11-15 16-20 21-100 >100
18
== Accessed ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
4 11
== Modified ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
10 5
== Changed ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
```

```
10 5
Total count: 18
Directories: 3
Regular files: 15
Symbolic links: None
Special files: None
Hard links: None,
multilink files: None,
Space Saved by Hard links (KB): 0
Sparse data: None
Dedupe estimate: N/A
Total space for regular files: size: 10.0 KiB, used: 40 KiB
Total space for symlinks: size: 0, used: 0
Total space for directories: size: 12 KiB, used: 12 KiB
Total space used: 52 KiB
Xcp command : xcp copy -edupe <IP address or hostname of NFS
server>:/source_vol <destination NFS
export path>:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 38.9 KiB in (36.7 KiB/s), 81.3 KiB out (76.7 KiB/s)
Total Time : 1s.
STATUS : PASSED
```

**복사 - BS <n[k]>**

를 사용합니다 `-bs <n[k]>` 매개 변수 `copy` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 기본 블록 크기는 64K입니다.

구문

```
xcp copy -bs <n[k]> <ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp copy -bs 32k <IP address or hostname of
NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.57.04.742145
Xcp command : xcp copy -bs 32k <IP address or hostname of NFS
server>:/source_vol <IP address of
destination NFS server>:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 39.1 KiB in (115 KiB/s), 81.6 KiB out (241 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 복사 - 병렬 **<n>**

를 사용합니다 `-parallel <n>` 매개 변수 `copy` 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은
7입니다.

구문

```
xcp copy -parallel <n> <ip_address_or_hostname>:/source_vol
destination_ip_address_or_hostname:/<dest_vol>
```

예제 보기

```
[root@localhost linux]# ./xcp copy -parallel 4 <IP address or hostname
of NFS server>:/source_vol
<IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_copy_2020-03-
03_23.59.41.477783
Xcp command : xcp copy -parallel 4 <IP address or hostname of NFS
server>:/source_vol <IP address
of destination NFS server>:/dest_vol
18 scanned, 0 matched, 17 copied, 0 error
Speed : 39.1 KiB in (35.6 KiB/s), 81.6 KiB out (74.4 KiB/s)
Total Time : 1s.
STATUS : PASSED
```

**copy-preserve-atime** 을 선택합니다

를 사용합니다 `-preserve-atime` 매개 변수 `copy` 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복구하는 명령입니다.

를 클릭합니다 `-preserve-atime` 옵션은 액세스 시간을 XCP 읽기 작업 전에 설정된 원래 값으로 재설정합니다.

구문

```
xcp copy -preserve-atime <source_ip_address_or_hostname>:/source_vol
<destination_ip_address_or_hostname>:/dest_vol
```

예제 보기

```
[root@client1 linux]# ./xcp copy -preserve-atime
101.10.10.10:/source_vol 10.102.102.10:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2022-06-
30_14.22.53.742272
xcp: Job ID: Job_XCP_copy_2022-06-30_14.22.53.742272_2022-06-
30_14.22.53.742272_copy
Xcp command : xcp copy -preserve-atime 101.10.10.10:/source_vol
10.102.102.10:/dest_vol
Stats : 55 scanned, 54 copied, 55 indexed
Speed : 1.26 MiB in (852 KiB/s), 1.32 MiB out (896 KiB/s)
Total Time : 1s.
Migration ID: XCP_copy_2022-06-30_14.22.53.742272
Job ID : Job_XCP_copy_2022-06-30_14.22.53.742272_2022-06-
30_14.22.53.742272_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2022-06-
30_14.22.53.742272_2022-06-
30_14.22.53.742272_copy.log
STATUS : PASSED
[root@client1 linux]#
```

**-s3.insecure** 을 복사합니다

를 사용합니다 `-s3.insecure` 매개 변수 `copy` S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 명령

구문

```
xcp copy -s3.insecure s3://<bucket_name>
```

```
[root@client1 linux]# ./xcp copy -s3.insecure hdfs:///user/test
s3://bucket1

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
08_09.01.47.581599
Job ID: Job_XCP_copy_2023-06-08_09.01.47.581599_copy
Xcp command : xcp copy -s3.insecure hdfs:///user/test s3://bucket1
Stats : 8 scanned, 5 copied, 8 indexed, 5 KiB s3.data.uploaded, 5
s3.copied.single.key.file, 5 s3.copied.file
Speed : 6.78 KiB in (1.86 KiB/s), 83.3 KiB out (22.9 KiB/s)
Total Time : 3s.
Migration ID: XCP_copy_2023-06-08_09.01.47.581599
Job ID : Job_XCP_copy_2023-06-08_09.01.47.581599_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
08_09.01.47.581599_copy.log
STATUS : PASSED

[root@client1 linux]# ./xcp copy -s3.insecure hdfs:///user/demo
s3://bucket1

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
08_09.15.58.807485
Job ID: Job_XCP_copy_2023-06-08_09.15.58.807485_copy
Xcp command : xcp copy -s3.insecure hdfs:///user/demo s3://bucket1
Stats : 8 scanned, 5 copied, 8 indexed, 5 KiB s3.data.uploaded, 5
s3.copied.single.key.file, 5 s3.copied.file
Speed : 10.4 KiB in (3.60 KiB/s), 85.3 KiB out (29.6 KiB/s)
Total Time : 2s.
Migration ID: XCP_copy_2023-06-08_09.15.58.807485
Job ID : Job_XCP_copy_2023-06-08_09.15.58.807485_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
08_09.15.58.807485_copy.log
STATUS : PASSED
```

**Copy-s3.Endpoint <s3_endpoint_url> 를 참조하십시오**

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수 `copy` S3 버킷 통신을 위해 지정된 URL로 기본
AWS 끝점 URL을 재정의하는 명령입니다.

구문

```
xcp copy -s3.endpoint https://<endpoint_url>: s3://<bucket_name>
```

```
root@client1 linux]# ./xcp copy -s3.endpoint https://<endpoint_url>:
hdfs:///user/test
s3://xcp-testing

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
13_11.20.32.571348
Job ID: Job_XCP_copy_2023-06-13_11.20.32.571348_copy
Xcp command : xcp copy -s3.endpoint https://<endpoint_url>
hdfs:///user/test s3://xcp-testing
Stats : 8 scanned, 5 copied, 8 indexed, 5 KiB s3.data.uploaded, 5
s3.copied.single.key.file, 5 s3.copied.file
Speed : 6.78 KiB in (1.77 KiB/s), 83.6 KiB out (21.8 KiB/s)
Total Time : 3s.
Migration ID: XCP_copy_2023-06-13_11.20.32.571348
Job ID : Job_XCP_copy_2023-06-13_11.20.32.571348_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.20.32.571348_copy.log
STATUS : PASSED
[root@client1 linux]# ./xcp copy -s3.endpoint https://<endpoint_url>:
hdfs:///user/demo
s3://xcp-testing

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
13_11.40.26.913130
Job ID: Job_XCP_copy_2023-06-13_11.40.26.913130_copy
15,009 scanned, 1,462 copied, 9 indexed, 1.46 MiB s3.data.uploaded,
1,491
s3.copied.single.key.file, 1,491 s3.copied.file, 4.58 MiB in (933
KiB/s), 1.72 MiB out (350
KiB/s), 5s
15,009 scanned, 4,283 copied, 9 indexed, 4.20 MiB s3.data.uploaded,
4,302
s3.copied.single.key.file, 4,302 s3.copied.file, 7.70 MiB in (629
KiB/s), 4.85 MiB out (632
KiB/s), 10s
15,009 scanned, 7,323 copied, 9 indexed, 7.17 MiB s3.data.uploaded,
7,343
s3.copied.single.key.file, 7,343 s3.copied.file, 11.0 MiB in (672
KiB/s), 8.24 MiB out (681
KiB/s), 15s
15,009 scanned, 10,427 copied, 9 indexed, 10.2 MiB s3.data.uploaded,
10,439
```

```
s3.copied.single.key.file, 10,439 s3.copied.file, 14.5 MiB in (690
KiB/s), 11.7 MiB out (695
KiB/s), 20s
15,009 scanned, 13,445 copied, 9 indexed, 13.1 MiB s3.data.uploaded,
13,454
s3.copied.single.key.file, 13,454 s3.copied.file, 17.8 MiB in (676
KiB/s), 15.0 MiB out (682
KiB/s), 25s
Xcp command : xcp copy -s3.endpoint https://<endpoint_url>:
hdfs:///user/demo s3://xcp-testing
Stats : 15,009 scanned, 15,005 copied, 15,009 indexed, 14.7 MiB
s3.data.uploaded, 15,005
s3.copied.single.key.file, 15,005 s3.copied.file
Speed : 19.2 MiB in (712 KiB/s), 17.1 MiB out (635 KiB/s)
Total Time : 27s.
Migration ID: XCP_copy_2023-06-13_11.40.26.913130
Job ID : Job_XCP_copy_2023-06-13_11.40.26.913130_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.40.26.913130_copy.log
STATUS : PASSED
```

**-s3.profile <name> 를 복사합니다**

를 사용합니다 s3.profile 매개 변수 copy S3 버킷 통신에 사용할 AWS 자격 증명 파일에서 프로필을 지정하는
명령

구문

```
xcp copy -s3.profile <name> -s3.endpoint https://<endpoint_url>:
s3://<bucket_name>
```

## 예제 보기

```
root@client1 linux]# ./xcp copy -s3.endpoint https://<endpoint_url>:
hdfs:///user/test
s3://xcp-testing

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
13_11.20.32.571348
Job ID: Job_XCP_copy_2023-06-13_11.20.32.571348_copy
Xcp command : xcp copy -s3.endpoint https://<endpoint_url>
hdfs:///user/test s3://xcp-testing
Stats : 8 scanned, 5 copied, 8 indexed, 5 KiB s3.data.uploaded, 5
s3.copied.single.key.file, 5 s3.copied.file
Speed : 6.78 KiB in (1.77 KiB/s), 83.6 KiB out (21.8 KiB/s)
Total Time : 3s.
Migration ID: XCP_copy_2023-06-13_11.20.32.571348
Job ID : Job_XCP_copy_2023-06-13_11.20.32.571348_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.20.32.571348_copy.log
STATUS : PASSED
[root@client1 linux]# ./xcp copy -s3.endpoint https://<endpoint_url>:
hdfs:///user/demo
s3://xcp-testing

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
13_11.40.26.913130
Job ID: Job_XCP_copy_2023-06-13_11.40.26.913130_copy
15,009 scanned, 1,462 copied, 9 indexed, 1.46 MiB s3.data.uploaded,
1,491
s3.copied.single.key.file, 1,491 s3.copied.file, 4.58 MiB in (933
KiB/s), 1.72 MiB out (350
KiB/s), 5s
15,009 scanned, 4,283 copied, 9 indexed, 4.20 MiB s3.data.uploaded,
4,302
s3.copied.single.key.file, 4,302 s3.copied.file, 7.70 MiB in (629
KiB/s), 4.85 MiB out (632
KiB/s), 10s
15,009 scanned, 7,323 copied, 9 indexed, 7.17 MiB s3.data.uploaded,
7,343
s3.copied.single.key.file, 7,343 s3.copied.file, 11.0 MiB in (672
KiB/s), 8.24 MiB out (681
KiB/s), 15s
15,009 scanned, 10,427 copied, 9 indexed, 10.2 MiB s3.data.uploaded,
10,439
```

```
s3.copied.single.key.file, 10,439 s3.copied.file, 14.5 MiB in (690
KiB/s), 11.7 MiB out (695
KiB/s), 20s
15,009 scanned, 13,445 copied, 9 indexed, 13.1 MiB s3.data.uploaded,
13,454
s3.copied.single.key.file, 13,454 s3.copied.file, 17.8 MiB in (676
KiB/s), 15.0 MiB out (682
KiB/s), 25s
Xcp command : xcp copy -s3.endpoint https://<endpoint_url>:
hdfs:///user/demo s3://xcp-testing
Stats : 15,009 scanned, 15,005 copied, 15,009 indexed, 14.7 MiB
s3.data.uploaded, 15,005
s3.copied.single.key.file, 15,005 s3.copied.file
Speed : 19.2 MiB in (712 KiB/s), 17.1 MiB out (635 KiB/s)
Total Time : 27s.
Migration ID: XCP_copy_2023-06-13_11.40.26.913130
Job ID : Job_XCP_copy_2023-06-13_11.40.26.913130_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.40.26.913130_copy.log
STATUS : PASSED
```

**-s3.noverify 을 복사합니다**

를 사용합니다 `-s3.noverify` 매개 변수 `copy` S3 버킷 통신에 대한 SSL 인증의 기본 검증을 재정의하는 명령입니다.

구문

```
xcp copy -s3.noverify s3://<bucket_name>
```

```
[root@client1 linux]# ./xcp copy -s3.noverify hdfs://user/test s3://
bucket1

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
13_10.57.41.994969
Job ID: Job_XCP_copy_2023-06-13_10.57.41.994969_copy
Xcp command : xcp copy -s3.noverify hdfs://user/test s3://bucket1
Stats : 8 scanned, 5 copied, 8 indexed, 5 KiB s3.data.uploaded, 5
s3.copied.single.key.file, 5 s3.copied.file
Speed : 6.78 KiB in (2.36 KiB/s), 83.3 KiB out (29.0 KiB/s)
Total Time : 2s.
Migration ID: XCP_copy_2023-06-13_10.57.41.994969
Job ID : Job_XCP_copy_2023-06-13_10.57.41.994969_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_10.57.41.994969_copy.log
STATUS : PASSED
./xcp copy -s3.profile sg -s3.noverify -s3.endpoint
https://<endpoint_url>: hdfs:///user/demo s3://bucket1

xcp: WARNING: No index name has been specified, creating one with name:
XCP_copy_2023-06-
13_11.26.56.143287
Job ID: Job_XCP_copy_2023-06-13_11.26.56.143287_copy
1 scanned, 9.95 KiB in (1.99 KiB/s), 12.9 KiB out (2.58 KiB/s), 5s
15,009 scanned, 1,555 copied, 9 indexed, 1.54 MiB s3.data.uploaded,
1,572
s3.copied.single.key.file, 1,572 s3.copied.file, 4.68 MiB in (951
KiB/s), 1.81 MiB out (365
KiB/s), 10s
15,009 scanned, 4,546 copied, 9 indexed, 4.46 MiB s3.data.uploaded,
4,572
s3.copied.single.key.file, 4,572 s3.copied.file, 7.95 MiB in (660
KiB/s), 5.15 MiB out (674
KiB/s), 15s
15,009 scanned, 7,702 copied, 9 indexed, 7.53 MiB s3.data.uploaded,
7,710
s3.copied.single.key.file, 7,710 s3.copied.file, 11.5 MiB in (710
KiB/s), 8.65 MiB out (707
KiB/s), 20s
15,009 scanned, 10,653 copied, 9 indexed, 10.4 MiB s3.data.uploaded,
10,669
s3.copied.single.key.file, 10,669 s3.copied.file, 14.7 MiB in (661
KiB/s), 11.9 MiB out (670
```

```
KiB/s), 25s
15,009 scanned, 13,422 copied, 9 indexed, 13.1 MiB s3.data.uploaded,
13,428
s3.copied.single.key.file, 13,428 s3.copied.file, 17.8 MiB in (627
KiB/s), 15.0 MiB out (627
KiB/s), 30s
Xcp command : xcp copy -s3.profile sg -s3.noverify -s3.endpoint
https://<endpoint_url>: hdfs:///user/demo s3://bucket1
Stats : 15,009 scanned, 15,005 copied, 15,009 indexed, 14.7 MiB
s3.data.uploaded, 15,005
s3.copied.single.key.file, 15,005 s3.copied.file
Speed : 19.2 MiB in (609 KiB/s), 17.1 MiB out (543 KiB/s)
Total Time : 32s.
Migration ID: XCP_copy_2023-06-13_11.26.56.143287
Job ID : Job_XCP_copy_2023-06-13_11.26.56.143287_copy
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.26.56.143287_copy.log
STATUS : PASSED
```

## 동기화

XCP에 대한 설명, 매개 변수 및 예를 봅니다 `sync` 명령을 실행합니다 `sync` 명령은 와 함께 사용됩니다 `dry run` 옵션을 선택합니다.

### 동기화

xCP NFS입니다 `sync` 명령은 카탈로그 인덱스 태그 이름 또는 이전 복제 작업의 번호를 사용하여 소스 NFS 디렉토리의 변경 및 수정 사항을 검색합니다. 소스에 대한 증가분 변경 사항이 복제되고 타겟 디렉토리에 적용됩니다. 이전 카탈로그 인덱스 번호는 동기화 작업 후 새 것으로 대체됩니다.

ⓘ 동기화 작업 중에 수정된 파일과 디렉토리가 대상 NFSv3 내보내기로 다시 복제됩니다.

### 구문

```
xcp sync -id <catalog_name>
```

ⓘ 를 클릭합니다 `-id <catalog_name>` 매개 변수는 에 필요합니다 `sync` 명령.

예제 보기

```
[root@localhost linux]# ./xcp sync -id autoname_copy_2020-03-
04_01.10.22.338436

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync -id autoname_copy_2020-03-04_01.10.22.338436
0 scanned, 0 copied, 0 modification, 0 new item, 0 delete item, 0 error
Speed : 26.4 KiB in (27.6 KiB/s), 22.7 KiB out (23.7 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `sync` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<sync_id,sync-id 동기화 ID 카탈로그_이름 | 이전 복사본 인덱스의 카탈로그 이름을 지정합니다. 의 필수 매개 변수입니다 `sync` 명령. |
| 동기화 - 이름 없음 | 파일 목록 및 보고서에서 사용자 및 그룹 이름을 제외합니다. |
| <<sync_bs,동기화 - BS n[k] | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<sync_dircount,동기화 디렉토리 수(); n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다. |
| <<sync_parallel,동기화 - 병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |
| sync-preserve-atime을 선택합니다 | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |

동기화 **-** 이름 없음

를 사용합니다 `-nonames` 매개 변수 `sync` 파일 목록 또는 보고서에서 사용자 및 그룹 이름을 제외하는 명령입니다.

구문

```
xcp sync -id <catalog_name> -nonames
```

예제 보기

```
[root@localhost linux]# ./xcp sync -id ID001 -nonames

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync -id ID001 -nonames
0 scanned, 0 copied, 0 modification, 0 new item, 0 delete item, 0 error
Speed : 26.4 KiB in (22.2 KiB/s), 22.3 KiB out (18.8 KiB/s)
Total Time : 1s.
STATUS : PASSED
```

**동기화 - BS <n[k]>**

를 사용합니다 `-bs <n[k]>` 매개 변수 `sync` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 기본 블록 크기는 64K입니다.

구문

```
xcp sync -id <catalog_name> -bs <n[k]>
```

예제 보기

```
[root@localhost linux]# ./xcp sync -id ID001 -bs 32k

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync -id ID001 -bs 32k
0 scanned, 0 copied, 0 modification, 0 new item, 0 delete item, 0 error
Speed : 25.3 KiB in (20.4 KiB/s), 21.0 KiB out (16.9 KiB/s)
Total Time : 1s.
STATUS : PASSED
```

**sync-dircount <n[k]>** 를 참조하십시오

를 사용합니다 `-dircount <n[k]>` 매개 변수 `sync` 명령을 사용하여 디렉토리를 읽을 때 요청 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp sync -id <catalog_name> -dircount <n[k]>
```

예제 보기

```
[root@localhost linux]# ./xcp sync -id ID001 -dircount 32k

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync -id ID001 -dircount 32k
0 scanned, 0 copied, 0 modification, 0 new item, 0 delete item, 0 error
Speed : 25.3 KiB in (27.8 KiB/s), 21.0 KiB out (23.0 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**동기화 - 병렬**

를 사용합니다 `-parallel` 매개 변수 `sync` 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은 7입니다.

구문

```
xcp sync -id <catalog_name> -parallel <n>
```

예제 보기

```
[root@localhost linux]# ./xcp sync -id ID001 -parallel 4

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync -id ID001 -parallel 4
0 scanned, 0 copied, 0 modification, 0 new item, 0 delete item, 0 error
Speed : 25.3 KiB in (20.6 KiB/s), 21.0 KiB out (17.1 KiB/s)
Total Time : 1s.
STATUS : PASSED
```

**-preserve-atime**

를 사용합니다 `-preserve-atime` 매개 변수 `sync` 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복구하는 명령입니다.

를 클릭합니다 `-preserve-atime` 옵션은 액세스 시간을 XCP 읽기 작업 전에 설정된 원래 값으로 재설정합니다.

구문

```
xcp sync -preserve-atime -id <catalog_name>
```

**예제 보기**

```
[root@client-1 linux]# ./xcp sync -preserve-atime -id XCP_copy_2022-06-
30_14.22.53.742272

xcp: Job ID: Job_XCP_copy_2022-06-30_14.22.53.742272_2022-06-
30_14.27.28.660165_sync
xcp: Index: {source: 101.10.10.10:/source_vol, target:
10.201.201.20:/dest_vol}
xcp: diff 'XCP_copy_2022-06-30_14.22.53.742272': 55 reviewed, 55
checked at source, 1 modification,
54 reindexed, 23.3 KiB in (15.7 KiB/s), 25.1 KiB out (16.9 KiB/s), 1s.
xcp: sync 'XCP_copy_2022-06-30_14.22.53.742272': Starting search pass
for 1 modified directory...
xcp: find changes: 55 reviewed, 55 checked at source, 1 modification,
55 re-reviewed, 54 reindexed,
28.0 KiB in (18.4 KiB/s), 25.3 KiB out (16.6 KiB/s), 1s.
xcp: sync phase 2: Rereading the 1 modified directory...
xcp: sync phase 2: 55 reviewed, 55 checked at source, 1 modification,
55 re-reviewed, 1 new dir, 54
reindexed, 29.2 KiB in (19.0 KiB/s), 25.6 KiB out (16.7 KiB/s), 1s.
xcp: sync 'XCP_copy_2022-06-30_14.22.53.742272': Deep scanning the 1
modified directory...
xcp: sync 'XCP_copy_2022-06-30_14.22.53.742272': 58 scanned, 55 copied,
56 indexed, 55 reviewed, 55
checked at source, 1 modification, 55 re-reviewed, 1 new dir, 54
reindexed, 1.28 MiB in (739
KiB/s), 1.27 MiB out (732 KiB/s), 1s.
Xcp command : xcp sync -preserve-atime -id XCP_copy_2022-06-
30_14.22.53.742272
Stats : 58 scanned, 55 copied, 56 indexed, 55 reviewed, 55 checked at
source, 1 modification,
55 re-reviewed, 1 new dir, 54 reindexed
Speed : 1.29 MiB in (718 KiB/s), 1.35 MiB out (755 KiB/s)
Total Time : 1s.
Migration ID: XCP_copy_2022-06-30_14.22.53.742272
Job ID : Job_XCP_copy_2022-06-30_14.22.53.742272_2022-06-
30_14.27.28.660165_sync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2022-06-
30_14.22.53.742272_2022-06-
30_14.27.28.660165_sync.log
STATUS : PASSED
```

동기화 드라이 런

를 클릭합니다 `sync` 명령과 함께 `dry-run` 옵션은 복제 작업의 이전 카탈로그 인덱스 번호를 사용하여 소스 NFS 디렉토리의 변경 또는 수정 사항을 찾습니다. 또한 이 명령은 이전 복제 작업 이후 새 파일, 이동, 삭제 또는 이름이 변경된 파일 및 디렉터리를 검색합니다. 명령은 소스 변경 내용을 보고하지만 타겟에 적용하지는 않습니다.

구문

```
xcp sync dry-run -id <catalog_name>
```

> ⓘ | 를 클릭합니다 `-id <catalog_name>` 매개 변수는 에 필요합니다 `sync dry-run` 명령 옵션.

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync dry-run -id ID001
0 matched, 0 error
Speed : 15.2 KiB in (46.5 KiB/s), 5.48 KiB out (16.7 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `sync dry-run` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<sync_dry_run_id,동기화 dry-run-id | 이전 복사본 인덱스의 카탈로그 이름을 지정합니다. 의 필수 매개 변수입니다 `sync` 명령. |
| 드라이 런 통계를 동기화합니다 | 수정된 디렉토리에 대한 상세 검사를 수행하고 모든 것을 보고합니다<br>새로운 기능. |
| Dry-run-l을 동기화합니다 | 변경된 파일 및 디렉토리에 대한 세부 정보를 인쇄합니다. |
| 동기화 dry-run-nonames | 파일 목록 및 보고서에서 사용자 및 그룹 이름을 제외합니다. |
| <<sync_dry_run_dircount,동기화 dry-run-dircount n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다. |
| <<sync_dry_run_parallel,동기화 건식 병렬 병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |

**dry-run-id <catalog_name> 동기화**

를 사용합니다 `-id <catalog_name>` 매개 변수가 포함된 경우 `sync dry-run` 이전 복사본 인덱스의 카탈로그 이름을 지정합니다.

ⓘ 를 클릭합니다 `-id <catalog_name>` 매개 변수는 에 필요합니다 `sync dry-run` 명령 옵션.

구문

```
xcp sync dry-run -id <catalog_name>
```

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync dry-run -id ID001
0 matched, 0 error
Speed : 15.2 KiB in (21.7 KiB/s), 5.48 KiB out (7.81 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

드라이 런 통계를 동기화합니다

를 사용합니다 `-stats` 매개 변수가 포함된 경우 `sync dry-run` 수정된 디렉토리를 자세히 검사하고 새로운 모든 사항을 보고합니다.

구문

```
xcp sync dry-run -id <catalog_name> -stats
```

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001 -stats

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
4,895 reviewed, 43,163 checked at source, 12.8 MiB in (2.54 MiB/s),
5.49 MiB out (1.09 MiB/s),
5s
4,895 reviewed, 101,396 checked at source, 19.2 MiB in (1.29 MiB/s),
12.8 MiB out (1.47 MiB/s),
10s
Xcp command : xcp sync dry-run -id ID001 -stats
0 matched, 0 error
Speed : 22.9 MiB in (1.74 MiB/s), 17.0 MiB out (1.29 MiB/s)
Total Time : 13s.
STATUS : PASSED
```

**Dry-run-l**을 동기화합니다

를 사용합니다 -l 매개 변수가 포함된 경우 sync dry-run 변경된 파일 및 디렉토리에 대한 세부 정보를 인쇄합니다.

구문

```
xcp sync dry-run -id <catalog_name> -l
```

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001 -l

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync dry-run -id ID001 -l
0 matched, 0 error
Speed : 15.2 KiB in (13.6 KiB/s), 5.48 KiB out (4.88 KiB/s)
Total Time : 1s.
STATUS : PASSED
```

동기화 **dry-run-nonames**

를 사용합니다 `-nonames` 매개 변수가 포함된 경우 `sync dry-run` 파일 목록 또는 보고서에서 사용자 및 그룹 이름을 제외합니다.

구문

```
xcp sync dry-run -id <catalog_name> -nonames
```

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001 -nonames

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync dry-run -id ID001 -nonames
0 matched, 0 error
Speed : 15.2 KiB in (15.8 KiB/s), 5.48 KiB out (5.70 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

**Dry-run-dircount <n[k]>** 동기화

를 사용합니다 `-dircount <n[k]>` 매개 변수가 포함된 경우 `sync dry-run` 디렉토리를 읽을 때 요청 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp sync dry-run -id <catalog_name> -dircount <n[k]>
```

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001 -dircount 32k

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync dry-run -id ID001 -dircount 32k
0 matched, 0 error
Speed : 15.2 KiB in (32.5 KiB/s), 5.48 KiB out (11.7 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

건식 병렬 동기화

를 사용합니다 `-parallel` 매개 변수가 포함된 경우 `sync dry-run` 동시 배치 프로세스의 최대 수를 지정합니다. 기본값은 7입니다.

구문

```
xcp sync dry-run -id <catalog_name> -parallel <n>
```

예제 보기

```
[root@localhost linux]# ./xcp sync dry-run -id ID001 -parallel 4

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
Xcp command : xcp sync dry-run -id ID001 -parallel 4
0 matched, 0 error
Speed : 15.2 KiB in (25.4 KiB/s), 5.48 KiB out (9.13 KiB/s)
Total Time : 0s.
STATUS : PASSED
```

## 다시 시작

xCP NFS입니다 `resume` 명령은 카탈로그 인덱스 이름 또는 번호를 지정하여 중단된 복사 작업을 다시 시작합니다. 이전 복사 작업의 카탈로그 인덱스 이름 또는 번호는 에 있습니다 `<catalog path>:/catalog/indexes` 디렉토리.

구문

```
xcp resume -id <catalog_name>
```

> ⓘ  를 클릭합니다 `-id <catalog_name>` 매개 변수는 에 필요합니다 `resume` 명령.

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**예제 보기**

```
[root@localhost linux]# ./xcp resume -id ID001

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
xcp: resume 'ID001': Reviewing the incomplete index...
xcp: diff 'ID001': Found 652 completed directories and 31 in progress
4,658 reviewed, 362 KiB in (258 KiB/s), 7.66 KiB out (5.46 KiB/s), 1s.
xcp: resume 'ID001': Starting second pass for the in-progress
directories...
xcp: resume 'ID001': Resuming the in-progress directories...
xcp: resume 'ID001': Resumed command: copy {-newid: u'ID001'}
xcp: resume 'ID001': Current options: {-id: 'ID001'}
xcp: resume 'ID001': Merged options: {-id: 'ID001', -newid: u'ID001'}
xcp: resume 'ID001': Values marked with a * include operations before
resume
28,866
MiB/s),
scanned*,
5s 9,565 copied*, 4,658 indexed*, 108 MiB in (21.6 MiB/s), 100.0 MiB
out(20.0
44,761
MiB/s),
44,761
scanned*,
11s
scanned*,
16,440
20,795
copied*,
copied*,
4,658 indexed*, 206 MiB in (19.3 MiB/s), 191 MiB out (17.9
4,658 indexed*, 362 MiB in (31.3 MiB/s), 345 MiB out (30.8
MiB/s),
44,761
16s
scanned*, 25,985 copied*, 4,658 indexed*, 488 MiB in (25.2 MiB/s), 465
MiB out (24.0
MiB/s),
44,761
21s
scanned*, 31,044 copied*, 4,658 indexed*, 578 MiB in (17.9 MiB/s), 558
MiB out (18.6
```

MiB/s),
54,838
26s
scanned*, 36,980 copied*, 14,276 indexed*, 679 MiB in (20.2 MiB/s), 657
MiB out (19.8
MiB/s),
67,123
31s
scanned*, 42,485 copied*, 29,160 indexed*, 742 MiB in (12.5 MiB/s), 720
MiB out (12.4
MiB/s),
79,681
36s
scanned*, 49,863 copied*, 39,227 indexed*, 801 MiB in (11.8 MiB/s), 779
MiB out (11.7
MiB/s),
79,681
41s
scanned*, 56,273 copied*, 39,227 indexed*, 854 MiB in (10.6 MiB/s), 832
MiB out (10.6
MiB/s),
79,681
46s
scanned*, 62,593 copied*, 39,227 indexed*, 906 MiB in (10.2 MiB/s), 881
MiB out (9.70
MiB/s),
84,577
51s
scanned*, 68,000 copied*, 44,047 indexed*, 976 MiB in (14.0 MiB/s), 951
MiB out (14.1
MiB/s),
86,737
56s
scanned*, 72,738 copied*, 49,071 indexed*, 1.04 GiB in (17.8 MiB/s),
1.01 GiB out (17.5
MiB/s),
89,690
1m1s
scanned*, 77,440 copied*, 54,110 indexed*, 1.14 GiB in (20.5 MiB/s),
1.11 GiB out (20.1
MiB/s), 1m6s
110,311 scanned*, 84,497 copied*, 74,158 indexed*, 1.24 GiB in (20.3
MiB/s), 1.21 GiB out (20.4
MiB/s), 1m11s
114,726 scanned*, 91,285 copied*, 74,158 indexed*, 1.33 GiB in (17.9
MiB/s), 1.30 GiB out (17.6

```
MiB/s), 1m16s
114,726 scanned*, 97,016 copied*, 74,158 indexed*, 1.46 GiB in (26.6
MiB/s), 1.43 GiB out (26.6
MiB/s), 1m21s
118,743 scanned*, 100,577 copied*, 79,331 indexed*, 1.65 GiB in (40.1
MiB/s), 1.62 GiB out (39.3
MiB/s), 1m26s
122,180 scanned*, 106,572 copied*, 84,217 indexed*, 1.77 GiB in (24.7
MiB/s), 1.74 GiB out (25.0
MiB/s), 1m31s
124,724 scanned*, 111,727 copied*, 84,217 indexed*, 1.89 GiB in (22.8
MiB/s), 1.86 GiB out (22.5
MiB/s), 1m36s
128,268 scanned*, 114,686 copied*, 99,203 indexed*, 1.99 GiB in (21.1
MiB/s), 1.96 GiB out (21.2
MiB/s), 1m41s
134,630 scanned*, 118,217 copied*, 104,317 indexed*, 2.06 GiB in (13.8
MiB/s), 2.03 GiB out
(13.7 MiB/s), 1m46s
134,630 scanned*, 121,742 copied*, 109,417 indexed*, 2.10 GiB in (9.02
MiB/s), 2.07 GiB out
(9.30 MiB/s), 1m51s
134,630 scanned*, 126,057 copied*, 109,417 indexed*, 2.20 GiB in (21.0
MiB/s), 2.17 GiB out
(21.0 MiB/s), 1m56s
134,630 scanned*, 130,034 copied*, 114,312 indexed*, 2.36 GiB in (32.1
MiB/s), 2.33 GiBout
(31.8 MiB/s), 2m1s
Xcp command : xcp resume -id ID001
134,630 scanned*, 134,630 copied*, 0 modification, 0 new item, 0 delete
item, 0 error
Speed : 2.40 GiB in (19.7 MiB/s), 2.37 GiB out (19.5 MiB/s)
Total Time : 2m4s.
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 resume 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<resume_id,이력서 - id | 이전 복사본 인덱스의 카탈로그 이름을 지정합니다. resume 명령의 필수 매개 변수입니다. |
| <<resume_bs,다시 시작 - BS n[k] | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<resume_dircount,다시 시작 - dircount n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다. |
| <<resume_parallel,다시 시작 - 병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |

| 매개 변수 | 설명 |
|---|---|
| resume-preserve-atime 을 참조하십시오 | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |
| -s3.insecure 을 다시 시작합니다 | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| <<resume_s3_endpoint,resume-s3.endpoint | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<resume_s3_profile,-s3.profile 다시 시작();PROFILE_NAME | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| -s3.noverify 을 다시 시작합니다 | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

이력서 **- BS <n[k]>**

를 사용합니다 `-bs <n[k]>` 매개 변수 `resume` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 기본 블록 크기는 64K입니다.

구문

```
xcp resume -id <catalog_name> -bs <n[k]>
```

## 예제 보기

```
[root@localhost linux]# ./xcp resume -id ID001 -bs 32k

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
xcp: resume 'ID001': Reviewing the incomplete index...
xcp: diff 'ID001': Found 2,360 completed directories and 152 in
progress
19,440 reviewed, 1.28 MiB in (898 KiB/s), 9.77 KiB out (6.71 KiB/s),
1s.
xcp: resume 'ID001': Starting second pass for the in-progress
directories...
xcp: resume 'ID001': Resuming the in-progress directories...
xcp: resume 'ID001': Resumed command: copy {-newid: u'ID001'}
xcp: resume 'ID001': Current options: {-bs: '32k', -id: 'ID001'}
xcp: resume 'ID001': Merged options: {-bs: '32k', -id: 'ID001', -newid:
u'ID001'}
xcp: resume 'ID001': Values marked with a * include operations before
resume
44,242
MiB/s),
scanned*,
5s 24,132 copied*, 19,440 indexed*, 36.7 MiB in (7.34 MiB/s), 30.6 MiB
out (6.12
59,558
MiB/s),
59,558
scanned*,
10s
scanned*,
30,698
35,234
copied*,
copied*,
19,440
19,440
indexed*,
indexed*,
142
203
MiB
MiB
in
```

in
(20.9 MiB/s), 125
(12.1 MiB/s), 187
MiB
MiB
out
out
(18.8
(12.2
MiB/s),
59,558
15s
scanned*, 40,813 copied*, 19,440 indexed*, 286 MiB in (16.5 MiB/s), 269
MiB out (16.5
MiB/s),
65,126
20s
scanned*, 46,317 copied*, 24,106 indexed*, 401 MiB in (22.9 MiB/s), 382
MiB out (22.5
MiB/s),
69,214
25s
scanned*, 53,034 copied*, 29,031 indexed*, 496 MiB in (19.0 MiB/s), 476
MiB out (18.7
MiB/s),
85,438
30s
scanned*, 60,627 copied*, 53,819 indexed*, 591 MiB in (18.9 MiB/s), 569
MiB out (18.5
MiB/s),
94,647
35s
scanned*, 66,948 copied*, 53,819 indexed*, 700 MiB in (21.6 MiB/s), 679
MiB out (21.9
MiB/s),
94,647
40s
scanned*, 73,632 copied*, 53,819 indexed*, 783 MiB in (16.5 MiB/s), 761
MiB out (16.4
MiB/s),
99,683
45s
scanned*, 80,541 copied*, 58,962 indexed*, 849 MiB in (13.0 MiB/s), 824
MiB out (12.4
MiB/s), 50s
99,683

```
MiB/s),
scanned*,
55s
84,911 copied*, 58,962 indexed*, 1013 MiB in (32.8 MiB/s), 991 MiB out
(33.2
101,667 scanned*, 91,386 copied*, 73,849 indexed*, 1.06 GiB in (15.4
MiB/s), 1.04 GiB out (15.4
MiB/s), 1m0s
118,251 scanned*, 98,413 copied*, 89,168 indexed*, 1.13 GiB in (14.0
MiB/s), 1.11 GiB out (13.3
MiB/s), 1m5s
124,672 scanned*, 104,134 copied*, 89,168 indexed*, 1.25 GiB in (23.9
MiB/s), 1.22 GiB out (23.2
MiB/s), 1m10s
130,171 scanned*, 109,594 copied*, 94,016 indexed*, 1.38 GiB in (25.7
MiB/s), 1.35 GiB out (25.5
MiB/s), 1m15s
134,574 scanned*, 113,798 copied*, 94,016 indexed*, 1.52 GiB in (28.6
MiB/s), 1.48 GiB out (28.2
MiB/s), 1m20s
134,574 scanned*, 118,078 copied*, 94,016 indexed*, 1.64 GiB in (24.6
MiB/s), 1.61 GiB out (25.1
MiB/s), 1m25s
134,574 scanned*, 121,502 copied*, 94,016 indexed*, 1.80 GiB in (34.0
MiB/s), 1.77 GiB out (33.0
MiB/s), 1m30s
134,630 scanned*, 126,147 copied*, 104,150 indexed*, 1.88 GiB in (16.2
MiB/s), 1.86 GiB out
(17.5 MiB/s), 1m35s
134,630 scanned*, 131,830 copied*, 119,455 indexed*, 1.95 GiB in (13.6
MiB/s), 1.92 GiB out
(13.5 MiB/s), 1m41s
Xcp command : xcp resume -id ID001 -bs 32k
134,630 scanned*, 134,630 copied*, 0 modification, 0 new item, 0 delete
item, 0 error
Speed : 2.02 GiB in (19.9 MiB/s), 1.99 GiB out (19.7 MiB/s)
Total Time : 1m43s.
STATUS : PASSED
```

**resume-dircount <n[k]>** 를 참조하십시오

를 사용합니다 `-dircount <n[k]>` 매개 변수 `resume` 명령을 사용하여 디렉토리를 읽을 때 요청 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp resume -id <catalog_name> -dircount <n[k]>
```

```
root@localhost linux]# ./xcp resume -id ID001 -dircount 32k

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
xcp: resume 'ID001': Reviewing the incomplete index...
xcp: diff 'ID001': Found 4,582 completed directories and 238 in
progress
39,520 reviewed, 2.47 MiB in (1.49 MiB/s), 12.6 KiB out (7.62 KiB/s),
1s.
xcp: resume 'ID001': Starting second pass for the in-progress
directories...
xcp: resume 'ID001': Resuming the in-progress directories...
xcp: resume 'ID001': Resumed command: copy {-newid: u'ID001'}
xcp: resume 'ID001': Current options: {-dircount: '32k', -id: 'ID001'}
xcp: resume 'ID001': Merged options: {-dircount: '32k', -id: 'ID001',
-newid: u'ID001'}
xcp: resume 'ID001': Values marked with a * include operations before
resume
76,626 scanned*, 43,825 copied*, 39,520 indexed*, 31.7 MiB in (6.33
MiB/s), 23.0 MiB out (4.60
MiB/s), 5s
79,751 scanned*, 49,942 copied*, 39,520 indexed*, 140 MiB in (21.7
MiB/s), 131 MiB out (21.5
MiB/s), 10s
79,751 scanned*, 55,901 copied*, 39,520 indexed*, 234 MiB in (18.8
MiB/s), 223 MiB out (18.3
MiB/s), 15s
79,751 scanned*, 61,764 copied*, 39,520 indexed*, 325 MiB in (18.0
MiB/s), 313 MiB out (17.9
MiB/s), 20s
84,791 scanned*, 68,129 copied*, 44,510 indexed*, 397 MiB in (14.3
MiB/s), 384 MiB out (14.2
MiB/s), 25s
94,698 scanned*, 74,741 copied*, 54,039 indexed*, 485 MiB in (17.4
MiB/s), 473 MiB out (17.8
MiB/s), 30s
99,734 scanned*, 80,110 copied*, 59,044 indexed*, 605 MiB in (24.1
MiB/s), 591 MiB out (23.7
MiB/s), 35s
104,773 scanned*, 86,288 copied*, 69,005 indexed*, 716 MiB in (22.2
MiB/s), 703 MiB out (22.3
MiB/s), 40s
```

```
110,076 scanned*, 93,265 copied*, 79,102 indexed*, 795 MiB in (15.8
MiB/s), 781 MiB out (15.5
MiB/s), 45s
121,341 scanned*, 100,077 copied*, 84,096 indexed*, 897 MiB in (20.4
MiB/s), 881 MiB out (19.9
MiB/s), 50s
125,032 scanned*, 105,712 copied*, 89,132 indexed*, 1003 MiB in (21.2
MiB/s), 985 MiB out (20.7
MiB/s), 55s
129,548 scanned*, 110,382 copied*, 89,132 indexed*, 1.14 GiB in (32.0
MiB/s), 1.12 GiB out (32.1
MiB/s), 1m0s
131,976 scanned*, 115,158 copied*, 94,221 indexed*, 1.23 GiB in (19.2
MiB/s), 1.21 GiB out (18.3
MiB/s), 1m5s
134,430 scanned*, 119,161 copied*, 94,221 indexed*, 1.37 GiB in (27.8
MiB/s), 1.35 GiB out (28.3
MiB/s), 1m10s
134,630 scanned*, 125,013 copied*, 109,402 indexed*, 1.47 GiB in (21.2
MiB/s), 1.45 GiB out
(21.4 MiB/s), 1m15s
134,630 scanned*, 129,301 copied*, 114,532 indexed*, 1.61 GiB in (29.4
MiB/s), 1.60 GiB out
(29.8 MiB/s), 1m20s
134,630 scanned*, 132,546 copied*, 124,445 indexed*, 1.69 GiB in (14.8
MiB/s), 1.67 GiBout
(15.0 MiB/s), 1m25s
Xcp command : xcp resume -id ID001 -dircount 32k
134,630 scanned*, 134,630 copied*, 0 modification, 0 new item, 0 delete
item, 0 error
Speed : 1.70 GiB in (19.7 MiB/s), 1.69 GiB out (19.5 MiB/s)
Total Time : 1m28s.
STATUS : PASSED
```

### 재개 - 병렬 <n>

를 사용합니다 – `parallel <n>` 매개 변수 `resume` 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은 7입니다.

구문

```
xcp resume -id <catalog_name> -parallel <n>
```

```
[root@localhost linux]# ./xcp resume -id ID001 -parallel 3

xcp: Index: {source: <IP address or hostname of NFS
server>:/source_vol, target: <IP address of
destination NFS server>:/dest_vol}
xcp: resume 'ID001': Reviewing the incomplete index...
xcp: diff 'ID001': Found 2,347 completed directories and 149 in
progress
19,399 reviewed, 1.28 MiB in (659 KiB/s), 9.77 KiB out (4.93 KiB/s),
1s.
xcp: resume 'ID001': Starting second pass for the in-progress
directories...
xcp: resume 'ID001': Resuming the in-progress directories...
xcp: resume 'ID001': Resumed command: copy {-newid: u'ID001'}
xcp: resume 'ID001': Current options: {-id: 'ID001', -parallel: 3}
xcp: resume 'ID001': Merged options: {-id: 'ID001', -newid: u'ID001',
-parallel: 3}
xcp: resume 'ID001': Values marked with a * include operations before
resume
39,610 scanned*, 23,642 copied*, 19,399 indexed*, 56.3 MiB in (11.2
MiB/s), 45.8 MiB out (9.15
MiB/s), 5s
39,610 scanned*, 28,980 copied*, 19,399 indexed*, 145 MiB in (17.6
MiB/s), 134 MiB out (17.6
MiB/s), 10s
48,111 scanned*, 34,782 copied*, 34,042 indexed*, 223 MiB in (15.8
MiB/s), 212 MiB out (15.7
MiB/s), 15s
55,412 scanned*, 40,468 copied*, 34,042 indexed*, 317 MiB in (18.4
MiB/s), 304 MiB out (18.1
MiB/s), 21s
59,639 scanned*, 46,980 copied*, 39,032 indexed*, 390 MiB in (14.6
MiB/s), 377 MiB out (14.5
MiB/s), 26s
69,520 scanned*, 55,251 copied*, 49,006 indexed*, 438 MiB in (9.59
MiB/s), 423 MiB out (9.21
MiB/s), 31s
78,596 scanned*, 62,054 copied*, 59,001 indexed*, 492 MiB in (10.7
MiB/s), 476 MiB out (10.6
MiB/s), 36s
79,673 scanned*, 68,163 copied*, 59,001 indexed*, 610 MiB in (23.5
MiB/s), 593 MiB out (23.5
MiB/s), 41s
```

```
84,600 scanned*, 74,238 copied*, 64,150 indexed*, 723 MiB in (22.5
MiB/s), 705 MiB out (22.3
MiB/s), 46s
94,525 scanned*, 80,754 copied*, 74,157 indexed*, 807 MiB in (16.7
MiB/s), 788 MiB out (16.4
MiB/s), 51s
94,525 scanned*, 85,119 copied*, 74,157 indexed*, 1007 MiB in (39.9
MiB/s), 988 MiB out (39.9
MiB/s), 56s
09,514 scanned*, 93,474 copied*, 89,192 indexed*, 1.08 GiB in (20.7
MiB/s), 1.06 GiB out (20.2
MiB/s), 1m1s
111,953 scanned*, 100,639 copied*, 94,248 indexed*, 1.18 GiB in (19.3
MiB/s), 1.16 GiB out (19.2
MiB/s), 1m6s
114,605 scanned*, 105,958 copied*, 94,248 indexed*, 1.36 GiB in (36.8
MiB/s), 1.34 GiB out (36.6
MiB/s), 1m11s
124,531 scanned*, 112,340 copied*, 104,275 indexed*, 1.51 GiB in (29.8
MiB/s), 1.48 GiB out
(29.4 MiB/s), 1m16s
129,694 scanned*, 117,218 copied*, 109,236 indexed*, 1.67 GiB in (33.2
MiB/s), 1.65 GiB out
(33.1 MiB/s), 1m21s
131,753 scanned*, 123,850 copied*, 114,358 indexed*, 1.80 GiB in (25.9
MiB/s), 1.77 GiB out
(25.9 MiB/s), 1m26s
134,630 scanned*, 130,829 copied*, 124,437 indexed*, 1.85 GiB in (11.2
MiB/s), 1.83 GiBout
(11.2 MiB/s), 1m31s
Xcp command : xcp resume -id ID001 -parallel 3
134,630 scanned*, 134,630 copied*, 0 modification, 0 new item, 0 delete
item, 0 error
Speed : 2.02 GiB in (21.6 MiB/s), 2.00 GiB out (21.3 MiB/s)
Total Time : 1m35s.
STATUS : PASSED
```

**resume-preserve-atime** 을 참조하십시오

를 사용합니다 `-preserve-atime` 매개 변수 `resume` 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복구하는
명령입니다.

를 클릭합니다 `-preserve-atime` 매개 변수는 액세스 시간을 XCP 읽기 작업 전에 설정된 원래 값으로
재설정합니다.

```
xcp resume -id <catalog_name> -preserve-atime
```

**예제 보기**

```
root@client1 linux]# ./xcp resume -preserve-atime -id XCP_copy_2022-06-
30_14.22.53.742272

xcp: Job ID: Job_XCP_copy_2022-06-30_14.22.53.742272_2022-06-
30_14.37.07.746208_resume
xcp: Index: {source: 101.10.10.12:/source_vol, target:
10.102.102.70:/dest_vol}
xcp: Tune: Previous operation on id 'XCP_copy_2022-06-
30_14.22.53.742272' already completed;
nothing to resume
0 in (0/s), 0 out (0/s), 6s
Xcp command : xcp resume -preserve-atime -id XCP_copy_2022-06-
30_14.22.53.742272
Stats :
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 6s.
Migration ID: XCP_copy_2022-06-30_14.22.53.742272
Job ID : Job_XCP_copy_2022-06-30_14.22.53.742272_2022-06-
30_14.37.07.746208_resume
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2022-06-
30_14.22.53.742272_2022-06-
30_14.37.07.746208_resume.log
STATUS : PASSED
```

**-s3.insecure 을 다시 시작합니다**

를 사용합니다 `-s3.insecure` 매개 변수 `resume` S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 명령

> ⓘ 를 누릅니다 `-s3.insecure` 매개 변수는 과 함께 사용됩니다 `copy` 명령을 실행하면 다시 시작할 때
> 무시됩니다. 를 지정해야 합니다 `-s3.insecure` 다시 시작 시 옵션을 사용합니다.

**구문**

```
xcp resume -s3.insecure -id <catalog_name>
```

예제 보기

```
root@client1 linux]# ./xcp resume -s3.insecure -id XCP_copy_2023-06-
08_10.31.47.381883

Job ID: Job_XCP_copy_2023-06-08_10.31.47.381883_2023-06-
08_10.34.02.964143_resume
Index: {source: 1 hdfs:///user/demo, target: s3://bucket1/}
Reviewing the incomplete index...
Found 0 completed directories and 2 in progress
4,009 reviewed, 88.7 KiB in (76.1 KiB/s), 332 out (285/s), 1s.
4,009 reviewed, 90.9 KiB in (77.6 KiB/s), 2.44 KiB out (2.08 KiB/s),
1s.
Starting second pass for the in-progress directories...
4,009 reviewed, 4,009 re-reviewed, 179 KiB in (130 KiB/s), 2.72 KiB out
(1.98 KiB/s), 1s.
9,008 scanned*, 4,540 copied*, 4,009 indexed*, 534 KiB
s3.data.uploaded, 534
s3.copied.single.key.file, 534 s3.copied.file, 2.28 MiB in (464 KiB/s),
631 KiB out (126 KiB/s),
5s
9,008 scanned*, 5,551 copied*, 4,009 indexed*, 1.51 MiB
s3.data.uploaded, 1,544
s3.copied.single.key.file, 1,544 s3.copied.file, 3.38 MiB in (222
KiB/s), 1.74 MiB out (226
KiB/s), 10s
9,008 scanned*, 6,596 copied*, 4,009 indexed*, 2.53 MiB
s3.data.uploaded, 2,595
s3.copied.single.key.file, 2,595 s3.copied.file, 4.55 MiB in (235
KiB/s), 2.91 MiB out (236
KiB/s), 15s
9,008 scanned*, 7,658 copied*, 4,009 indexed*, 3.57 MiB
s3.data.uploaded, 3,652
s3.copied.single.key.file, 3,652 s3.copied.file, 5.71 MiB in (234
KiB/s), 4.09 MiB out (238
KiB/s), 20s
9,008 scanned*, 8,711 copied*, 4,009 indexed*, 4.60 MiB
s3.data.uploaded, 4,706
s3.copied.single.key.file, 4,706 s3.copied.file, 6.88 MiB in (235
KiB/s), 5.26 MiB out (236
KiB/s), 25s
Xcp command : xcp resume -s3.insecure -id XCP_copy_2023-06-
08_10.31.47.381883
Stats : 9,008 scanned*, 9,006 copied*, 9,009 indexed*, 4.88 MiB
s3.data.uploaded, 4,996
```

```
s3.copied.single.key.file, 4,996 s3.copied.file
Speed : 7.10 MiB in (270 KiB/s), 5.76 MiB out (219 KiB/s)
Total Time : 26s.
Migration ID: XCP_copy_2023-06-08_10.31.47.381883
Job ID : Job_XCP_copy_2023-06-08_10.31.47.381883_2023-06-
08_10.34.02.964143_resume
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
08_10.31.47.381883_2023-06-
08_10.34.02.964143_resume.log
STATUS : PASSED
```

**resume-s3.endpoint <s3_endpoint_url>**

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수 `resume` S3 버킷 통신을 위해 지정된 URL로 기본 AWS 끝점 URL을 재정의하는 명령입니다.

> (i) 기본적으로 Resume은 복사 작업 중에 지정된 S3 프로필 및 S3 끝점을 사용합니다. 그러나 재개 시 새 S3 끝점 및 S3 프로필을 지정하면 에 사용되는 기본값이 무시됩니다 `copy` 명령.

구문

```
xcp resume -s3.profile <profile_name> -s3.endpoint https://<endpoint_url>:
-id <catalog_name>
```

```
[root@client1 linux]# ./xcp resume -id XCP_copy_2023-06-
13_11.48.59.454327

Job ID: Job_XCP_copy_2023-06-13_11.48.59.454327_2023-06-
13_11.49.34.887164_resume
Index: {source: hdfs:///user/demo, target: s3://xcp-testing/}
Reviewing the incomplete index...
Found 0 completed directories and 2 in progress
9 reviewed, 4.53 KiB in (2.47 KiB/s), 188 out (102/s), 1s.
9 reviewed, 6.81 KiB in (3.70 KiB/s), 2.30 KiB out (1.25 KiB/s), 1s.
Starting second pass for the in-progress directories...
9 reviewed, 9 re-reviewed, 10.9 KiB in (5.65 KiB/s), 2.44 KiB out (1.26
KiB/s), 1s.
15,008 scanned*, 1,532 copied*, 9 indexed*, 1.50 MiB s3.data.uploaded,
1,539
s3.copied.single.key.file, 1,539 s3.copied.file, 4.64 MiB in (946
KiB/s), 1.77 MiB out (360
KiB/s), 6s
15,008 scanned*, 4,764 copied*, 9 indexed*, 4.67 MiB s3.data.uploaded,
4,784
s3.copied.single.key.file, 4,784 s3.copied.file, 8.21 MiB in (727
KiB/s), 5.38 MiB out (736
KiB/s), 11s
15,008 scanned*, 7,928 copied*, 9 indexed*, 7.75 MiB s3.data.uploaded,
7,935
5,008 scanned*, 7,928 copied*, 9 indexed*, 7.75 MiB s3.data.uploaded,
7,935
s3.copied.single.key.file, 7,935 s3.copied.file, 11.7 MiB in (703
KiB/s), 8.89 MiB out (708
KiB/s), 16s
15,008 scanned*, 10,863 copied*, 9 indexed*, 10.6 MiB s3.data.uploaded,
10,864
s3.copied.single.key.file, 10,864 s3.copied.file, 14.9 MiB in (660
KiB/s), 12.2 MiB out (664
KiB/s), 21s
15,008 scanned*, 14,060 copied*, 9 indexed*, 13.7 MiB s3.data.uploaded,
14,076
s3.copied.single.key.file, 14,076 s3.copied.file, 18.5 MiB in (716
KiB/s), 15.7 MiB out (725
KiB/s), 26s
Xcp command : xcp resume -id XCP_copy_2023-06-13_11.48.59.454327
Stats : 15,008 scanned*, 15,006 copied*, 15,009 indexed*, 14.6 MiB
s3.data.uploaded,
```

```
14,996 s3.copied.single.key.file, 14,996 s3.copied.file
Speed : 19.2 MiB in (708 KiB/s), 17.1 MiB out (631 KiB/s)
Total Time : 27s.
Migration ID: XCP_copy_2023-06-13_11.48.59.454327
Job ID : Job_XCP_copy_2023-06-13_11.48.59.454327_2023-06-
13_11.49.34.887164_resume
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.48.59.454327_2023-06-
13_11.49.34.887164_resume.log
STATUS : PASSED
```

**s3.profile <profile_name>를 다시 시작합니다**

를 사용합니다 `-s3.profile <profile_name>` 매개 변수 `resume` S3 버킷 통신에 사용할 AWS 자격 증명
파일에서 프로필을 지정하는 명령

> (i) 기본적으로 Resume은 복사 작업 중에 지정된 S3 프로필 및 S3 끝점을 사용합니다. 그러나 재개 시 새
> S3 끝점 및 S3 프로필을 지정하면 에 사용되는 기본값이 무시됩니다 `copy` 명령.

구문

```
xcp resume -s3.profile <name> -s3.endpoint -id <catalog_name>
```

예제 보기

```
[root@client1 linux]# ./xcp resume -s3.profile sg -s3.endpoint
https://<endpoint_url>: -id
XCP_copy_2023-06-08_10.40.42.519258

Job ID: Job_XCP_copy_2023-06-08_10.40.42.519258_2023-06-
08_10.52.18.453982_resume
Index: {source: hdfs:///user/demo target: s3://xxx-bucket/
Reviewing the incomplete index...
Found 0 completed directories and 2 in progress
9 reviewed, 4.53 KiB in (3.03 KiB/s), 188 out (126/s), 1s.
9 reviewed, 6.81 KiB in (4.52 KiB/s), 2.30 KiB out (1.53 KiB/s), 1s.
Starting second pass for the in-progress directories...
9 reviewed, 9 re-reviewed, 10.9 KiB in (6.76 KiB/s), 2.44 KiB out (1.51
KiB/s), 1s.
15,008 scanned*, 1,660 copied*, 9 indexed*, 1.64 MiB s3.data.uploaded,
1,675
s3.copied.single.key.file, 1,675 s3.copied.file, 4.75 MiB in (971
KiB/s), 1.92 MiB out (392
KiB/s), 5s
15,008 scanned*, 3,453 copied*, 9 indexed*, 3.39 MiB s3.data.uploaded,
3,467
s3.copied.single.key.file, 3,467 s3.copied.file, 6.79 MiB in (412
KiB/s), 3.91 MiB out (403
KiB/s), 10s
15,008 scanned*, 6,296 copied*, 9 indexed*, 6.16 MiB s3.data.uploaded,
6,305
s3.copied.single.key.file, 6,305 s3.copied.file, 9.86 MiB in (619
KiB/s), 7.08 MiB out (637
KiB/s), 15s
15,008 scanned*, 9,527 copied*, 9 indexed*, 9.33 MiB s3.data.uploaded,
9,554
s3.copied.single.key.file, 9,554 s3.copied.file, 13.4 MiB in (717
KiB/s), 10.7 MiB out (726
KiB/s), 20s
15,008 scanned*, 12,656 copied*, 9 indexed*, 12.4 MiB s3.data.uploaded,
12,648
s3.copied.single.key.file, 12,648 s3.copied.file, 16.9 MiB in (715
KiB/s), 14.1 MiB out (706
KiB/s), 25s
Xcp command : xcp resume -s3.profile sg -s3.endpoint
https://<endpoint_url>: -id XCP_copy_2023-
06-08_10.40.42.519258
Stats : 15,008 scanned*, 15,006 copied*, 15,009 indexed*, 14.6 MiB
```

```
s3.data.uploaded,
14,996 s3.copied.single.key.file, 14,996 s3.copied.file
Speed : 19.2 MiB in (661 KiB/s), 17.1 MiB out (590 KiB/s)
Total Time : 29s.
Migration ID: XCP_copy_2023-06-08_10.40.42.519258
Job ID : Job_XCP_copy_2023-06-08_10.40.42.519258_2023-06-
08_10.52.18.453982_resume
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
08_10.40.42.519258_2023-06-
08_10.52.18.453982_resume.log
STATUS : PASSED
```

**-s3.noverify** 을 다시 시작합니다

를 사용합니다 `-s3.noverify` 매개 변수 `resume` S3 버킷 통신에 대한 SSL 인증의 기본 검증을 재정의하는 명령입니다.

구문

```
xcp resume -s3.noverify -id <catalog_name>
```

**예제 보기**

```
[root@client1 linux]# ./xcp resume -s3.noverify -id XCP_copy_2023-06-
13_11.32.47.743708

Job ID: Job_XCP_copy_2023-06-13_11.32.47.743708_2023-06-
13_11.33.41.388541_resume
Index: {source: hdfs:///user/demo, target: s3://bucket/
Reviewing the incomplete index...
Found 0 completed directories and 2 in progress
9 reviewed, 4.53 KiB in (3.70 KiB/s), 188 out (153/s), 1s.
9 reviewed, 6.81 KiB in (5.52 KiB/s), 2.30 KiB out (1.87 KiB/s), 1s.
Starting second pass for the in-progress directories...
9 reviewed, 9 re-reviewed, 10.9 KiB in (8.19 KiB/s), 2.44 KiB out (1.83
KiB/s), 1s.
15,008 scanned*, 1,643 copied*, 9 indexed*, 1.62 MiB s3.data.uploaded,
1,662
s3.copied.single.key.file, 1,662 s3.copied.file, 4.78 MiB in (969
KiB/s), 1.90 MiB out (385
KiB/s), 5s
15,008 scanned*, 4,897 copied*, 9 indexed*, 4.78 MiB s3.data.uploaded,
4,892
s3.copied.single.key.file, 4,892 s3.copied.file, 8.38 MiB in (735
KiB/s), 5.50 MiB out (737
KiB/s), 10s
15,008 scanned*, 8,034 copied*, 9 indexed*, 7.86 MiB s3.data.uploaded,
8,048
s3.copied.single.key.file, 8,048 s3.copied.file, 11.8 MiB in (696
KiB/s), 9.02 MiB out (708
KiB/s), 15s
15,008 scanned*, 11,243 copied*, 9 indexed*, 11.0 MiB s3.data.uploaded,
11,258
s3.copied.single.key.file, 11,258 s3.copied.file, 15.3 MiB in (709
KiB/s), 12.6 MiB out (724
KiB/s), 20s
15,008 scanned*, 14,185 copied*, 9 indexed*, 13.9 MiB s3.data.uploaded,
14,195
s3.copied.single.key.file, 14,195 s3.copied.file, 18.6 MiB in (662
KiB/s), 15.9 MiB out (660
KiB/s), 25s
Xcp command : xcp resume -s3.noverify -id XCP_copy_2023-06-
13_11.32.47.743708
Stats : 15,008 scanned*, 15,006 copied*, 15,009 indexed*, 14.6 MiB
s3.data.uploaded,
14,996 s3.copied.single.key.file, 14,996 s3.copied.file
```

```
Speed : 19.2 MiB in (736 KiB/s), 17.1 MiB out (657 KiB/s)
Total Time : 26s.
Migration ID: XCP_copy_2023-06-13_11.32.47.743708
Job ID : Job_XCP_copy_2023-06-13_11.32.47.743708_2023-06-
13_11.33.41.388541_resume
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_XCP_copy_2023-06-
13_11.32.47.743708_2023-06-
13_11.33.41.388541_resume.log
STATUS : PASSED
```

## 확인합니다

를 클릭합니다 `verify` 명령은 카탈로그 인덱스 번호를 사용하지 않고 복제 작업 후 소스 디렉토리와 대상 디렉토리 간의 전체 바이트 단위 데이터 비교를 사용합니다. 명령은 사용 권한을 포함하여 수정 시간 및 기타 파일 또는 디렉토리 속성을 확인합니다. 또한 이 명령은 양쪽 모두에서 파일을 읽고 데이터를 비교합니다.

구문

```
xcp verify <source NFS export path> <destination NFS exportpath>
```

```
[root@localhost linux]# ./xcp verify <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
04_23.54.40.893449
32,493 scanned, 11,303 found, 7,100 compared, 7,100 same data, 374 MiB
in (74.7 MiB/s), 4.74 MiB
out (971 KiB/s), 5s
40,109 scanned, 24,208 found, 18,866 compared, 18,866 same data, 834
MiB in (91.5 MiB/s), 10.5
MiB out (1.14 MiB/s), 10s
56,030 scanned, 14,623 indexed, 33,338 found, 27,624 compared, 27,624
same data, 1.31 GiB in
(101 MiB/s), 15.9 MiB out (1.07 MiB/s), 15s
73,938 scanned, 34,717 indexed, 45,583 found, 38,909 compared, 38,909
same data, 1.73 GiB in
(86.3 MiB/s), 22.8 MiB out (1.38 MiB/s), 20s
76,308 scanned, 39,719 indexed, 61,810 found, 54,885 compared, 54,885
same data, 2.04 GiB in
(62.8 MiB/s), 30.2 MiB out (1.48 MiB/s), 25s
103,852 scanned, 64,606 indexed, 77,823 found, 68,301 compared, 68,301
same data, 2.31 GiB in
(56.0 MiB/s), 38.2 MiB out (1.60 MiB/s), 30s
110,047 scanned, 69,579 indexed, 89,082 found, 78,794 compared, 78,794
same data, 2.73 GiB in
(85.6 MiB/s), 43.6 MiB out (1.06 MiB/s), 35s
113,871 scanned, 79,650 indexed, 99,657 found, 89,093 compared, 89,093
same data, 3.23 GiB in
(103 MiB/s), 49.3 MiB out (1.14 MiB/s), 40s
125,092 scanned, 94,616 indexed, 110,406 found, 98,369 compared, 98,369
same data, 3.74 GiB in
(103 MiB/s), 55.0 MiB out (1.15 MiB/s), 45s
134,630 scanned, 104,764 indexed, 120,506 found, 106,732 compared,
106,732 same data, 4.23 GiB
in (99.9 MiB/s), 60.4 MiB out (1.05 MiB/s), 50s
134,630 scanned, 114,823 indexed, 129,832 found, 116,198 compared,
116,198 same data, 4.71 GiB
in (97.2 MiB/s), 65.5 MiB out (1.04 MiB/s), 55s
Xcp command : xcp verify <IP address of NFS server>:/source_vol <IP
address of destination NFS
server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
```

```
verified (data, attrs, mods), 0
different item, 0 error
Speed : 4.95 GiB in (86.4 MiB/s), 69.2 MiB out (1.18 MiB/s)
Total Time : 58s.
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `verify` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| verify-stats 를 참조하십시오 | 소스 및 타겟 트리를 병렬로 스캔하고 트리 통계를 비교합니다. |
| Verify-csv 를 참조하십시오 | 소스 및 타겟 트리를 병렬로 스캔하고 트리 통계를 비교합니다. |
| Verify-NoData(확인 - 데이터 없음 | 데이터를 확인하지 않습니다. |
| verify-noattrs 를 참조하십시오 | 특성을 검사하지 않습니다. |
| 확인 - nomods | 파일 수정 시간을 확인하지 않습니다. |
| <<nfs_verify_mtimewindow,확인-시간 표시기();s | 확인을 위해 허용되는 수정 시간 차이를 지정합니다. |
| 검증 - v | 발견된 차이점을 나열하기 위해 출력 형식을 검색합니다. |
| verify -I(확인 - I | 발견된 차이점을 나열하기 위해 출력 형식을 검색합니다. |
| Verify - 이름 없음 | 파일 목록 또는 보고서에서 사용자 및 그룹 이름을 제외합니다. |
| <<nfs_verify_match,확인-일치();필터(); | 형식과 일치하는 파일 및 디렉터리만 처리합니다. |
| <<nfs_verify_bs,확인 - BS n[k] | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<nfs_verify_parallel,확인-병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |
| <<nfs_verify_dircount,확인 - 디렉토리 수(); n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다. |
| noid를 확인합니다 | 기본 인덱스를 만들지 않습니다(기본값: False). |
| verify-preserve-atime 을 참조하십시오 | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |
| -s3.insecure 확인합니다 | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| <<nfs_verify_s3_endpoint,verify-s3.endpoint | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<nfs_verify_s3_profile,-s3.profile 확인();profile_name | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| -s3.noverify 확인합니다 | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

**verify-stats** 및 **verify-csv**

를 사용합니다 `-stats` 및 `-csv` 매개 변수 및 `verify` 소스 및 타겟 트리를 병렬로 스캔하고 트리 통계를 비교하는
명령입니다.

구문

```
cp verify -stats <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

**예제 보기**

```
[root@localhost linux]# ./xcp verify -stats
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

228,609 scanned, 49.7 MiB in (9.93 MiB/s), 3.06 MiB out (625 KiB/s), 5s
== Number of files ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
235 73,916 43,070 4,020 129 15
same same same same same same
== Directory entries ==
empty 1-10 10-100 100-1K 1K-10K >10K
3
same
10,300
same
2,727
same
67
same
11
same
== Depth ==
0-5 6-10 11-15 16-20 21-100 >100
47,120
same
79,772
same
7,608
same
130
same
== Modified ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
15
same 116,121
same 5,249
same
Total count: 134,630 / same
Directories: 13,108 / same
Regular files: 121,385 / same
Symbolic links: 137 / same
Special files: None / same
Hard links: None / same, Multilink files: None / same
Xcp command : xcp verify -stats <source_ip_address>:/source_vol
```

```
<<destination_ip_address>:/dest_vol
269,260 scanned, 0 matched, 0 error
Speed : 59.5 MiB in (7.44 MiB/s), 3.94 MiB out (506 KiB/s)
Total Time : 7s.
STATUS : PASSED
```

구문

```
xcp verify -csv <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp verify -csv
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

222,028 scanned, 48.2 MiB in (9.63 MiB/s), 2.95 MiB out (603 KiB/s), 5s
== Number of files ==
empty
235
same    <8KiB 73,916
same    8-64KiB
43,070
same    64KiB-1MiB
4,020
same    1-10MiB
129
same    10-100MiB   >100MiB
15
same
== Directory entries ==
empty   1-10    10-100  100-1K  1K-10K  >10K
3
same    10,300
same    2,727
same    67
same    11
same
== Depth ==
0-5
6-10
11-15
16-20
21-100
>100
47,120
same    79,772
same    7,608
same    130
same
== Modified ==
>1 year  >1 month
1-31 days
1-24 hrs
<1 hour
<15 mins
```

```
future
     15
same     121,370
same


Total count: 134,630 / same Directories: 13,108 / same Regular files:
121,385 / same Symbolic links: 137 / same Special files: None / same
Hard links: None / same, Multilink files: None / same

Xcp command : xcp verify -csv <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
269,260 scanned, 0 matched, 0 error
Speed    : 59.5 MiB in (7.53 MiB/s), 3.94 MiB out (512 KiB/s) Total Time
: 7s.
STATUS   : PASSED
```

구문

```
xcp verify -stats -csv <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

**예제 보기**

```
[root@localhost linux]# ./xcp verify -stats -csv <IP address of source
NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol

224,618 scanned, 48.7 MiB in (9.54 MiB/s), 2.98 MiB out (597 KiB/s), 5s
== Number of files ==
empty <8KiB 8-64KiB 64KiB-1MiB 1-10MiB 10-100MiB >100MiB
235 73,916 43,070 4,020 129 15
same same same same same same
== Directory entries ==
empty 1-10 10-100 100-1K 1K-10K >10K
3
same
10,300
same
2,727
same
67
same
11
same
== Depth ==
0-5 6-10 11-15 16-20 21-100 >100
47,120
same
79,772
same
7,608
same
130
same
== Modified ==
>1 year >1 month 1-31 days 1-24 hrs <1 hour <15 mins future
15
same 121,370
same
Total count: 134,630 / same
Directories: 13,108 / same
Regular files: 121,385 / same
Symbolic links: 137 / same
Special files: None / same
Hard links: None / same, Multilink files: None / same
Xcp command : xcp verify -stats -csv <IP address of source NFS
```

```
server>:/source_vol <IP
address of destination NFS server>:/dest_vol
269,260 scanned, 0 matched, 0 error
Speed : 59.5 MiB in (7.49 MiB/s), 3.94 MiB out (509 KiB/s)
Total Time : 7s.
STATUS : PASSED
```

**Verify-NoData(확인 - 데이터 없음**

를 사용합니다 `-nodata` 매개 변수 `verify` 데이터를 검사하지 않도록 지정하는 명령입니다.

구문

```
xcp verify -nodata <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp verify -nodata <IP address of source NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_02.18.01.159115
70,052 scanned, 29,795 indexed, 43,246 found, 25.8 MiB in (5.14 MiB/s),
9.39 MiB out
(1.87 MiB/s), 5s
117,136 scanned, 94,723 indexed, 101,434 found, 50.3 MiB in (4.90
MiB/s), 22.4 MiB out (2.60
MiB/s), 10s
Xcp command : xcp verify -nodata <IP address of source NFS
server>:/source_vol <IP address of
destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (attrs, mods), 0
different item, 0 error
Speed : 62.7 MiB in (4.65 MiB/s), 30.2 MiB out (2.24MiB/s)
Total Time : 13s.
STATUS : PASSED
```

**verify-noattrs 를 참조하십시오**

를 사용합니다 `-noattrs` 매개 변수 `verify` 속성을 검사하지 않도록 지정하는 명령입니다.

구문

```
xcp verify -noattrs <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

구문

```
[root@localhost linux]# ./xcp verify -noattrs <IP address of source NFS
server>:/source_vol <IP address
of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-05_02.19.14.011569

40,397 scanned, 9,917 found, 4,249 compared, 4,249 same data, 211 MiB
in (41.6 MiB/s), 3.78 MiB
out (764 KiB/s), 5s
40,397 scanned, 14,533 found, 8,867 compared, 8,867 same data, 475 MiB
in (52.9 MiB/s), 6.06 MiB
out (466 KiB/s), 10s
40,397 scanned, 20,724 found, 15,038 compared, 15,038 same data, 811
MiB in (67.0 MiB/s), 9.13
MiB out (628 KiB/s), 15s
40,397 scanned, 25,659 found, 19,928 compared, 19,928 same data, 1.02
GiB in (46.6 MiB/s), 11.5
MiB out (477 KiB/s), 20s
40,397 scanned, 30,535 found, 24,803 compared, 24,803 same data, 1.32
GiB in (62.0 MiB/s), 14.0
MiB out (513 KiB/s), 25s
75,179 scanned, 34,656 indexed, 39,727 found, 32,595 compared, 32,595
same data, 1.58 GiB in
(53.4 MiB/s), 20.1 MiB out (1.22 MiB/s), 30s
75,179 scanned, 34,656 indexed, 47,680 found, 40,371 compared, 40,371
same data, 1.74 GiB in
(32.3 MiB/s), 23.6 MiB out (717 KiB/s), 35s
75,179 scanned, 34,656 indexed, 58,669 found, 51,524 compared, 51,524
same data, 1.93 GiB in
(37.9 MiB/s), 28.4 MiB out (989 KiB/s), 40s
78,097 scanned, 39,772 indexed, 69,343 found, 61,858 compared, 61,858
same data, 2.12 GiB in
(39.0 MiB/s), 33.4 MiB out (1015 KiB/s), 45s
110,213 scanned, 69,593 indexed, 80,049 found, 69,565 compared, 69,565
same data, 2.37 GiB in
(51.3 MiB/s), 39.3 MiB out (1.18 MiB/s), 50s
110,213 scanned, 69,593 indexed, 86,233 found, 75,727 compared, 75,727
same data, 2.65 GiB in
(57.8 MiB/s), 42.3 MiB out (612 KiB/s), 55s
110,213 scanned, 69,593 indexed, 93,710 found, 83,218 compared, 83,218
same data, 2.93 GiB in
(56.1 MiB/s), 45.8 MiB out (705 KiB/s), 1m0s
110,213 scanned, 69,593 indexed, 99,700 found, 89,364 compared, 89,364
```

```
same data, 3.20 GiB in
(56.9 MiB/s), 48.7 MiB out (593 KiB/s), 1m5s
124,888 scanned, 94,661 indexed, 107,509 found, 95,304 compared, 95,304
same data, 3.54 GiB in
(68.6 MiB/s), 53.5 MiB out (1000 KiB/s), 1m10s
134,630 scanned, 104,739 indexed, 116,494 found, 102,792 compared,
102,792 same data, 3.94 GiB
in (81.7 MiB/s), 58.2 MiB out (949 KiB/s), 1m15s
134,630 scanned, 104,739 indexed, 123,475 found, 109,601 compared,
109,601 same data, 4.28 GiB
in (70.0 MiB/s), 61.7 MiB out (711 KiB/s), 1m20s
134,630 scanned, 104,739 indexed, 129,354 found, 115,295 compared,
115,295 same data, 4.55 GiB
in (55.3 MiB/s), 64.5 MiB out (572 KiB/s), 1m25s
Xcp command : xcp verify -noattrs <IP address of source NFS
server>:/source_vol <IP address
of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, mods), 0
different item, 0 error
Speed : 4.95 GiB in (56.5 MiB/s), 69.2 MiB out (789 KiB/s)
Total Time : 1m29s.
STATUS : PASSED
```

**확인 - nomods**

를 사용합니다 `-nomods` 매개 변수 `verify` 파일 수정 시간을 확인하지 않도록 지정하는 명령입니다.

구문

```
xcp verify -nomods <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

## 예제 보기

```
[root@localhost linux]# ./xcp verify -nomods <IP address of NFS
server>:/source_vol <IP address of
destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_02.22.33.738593
40,371 scanned, 10,859 found, 5,401 compared, 5,401 same data, 296 MiB
in (59.1 MiB/s), 4.29 MiB
out (876 KiB/s), 5s
40,371 scanned, 22,542 found, 17,167 compared, 17,167 same data, 743
MiB in (88.9 MiB/s), 9.67
MiB out (1.07 MiB/s), 10s
43,521 scanned, 4,706 indexed, 32,166 found, 26,676 compared, 26,676
same data, 1.17 GiB in
(91.3 MiB/s), 14.5 MiB out (996 KiB/s), 15s
70,260 scanned, 29,715 indexed, 43,680 found, 37,146 compared, 37,146
same data, 1.64 GiB in
(96.0 MiB/s), 21.5 MiB out (1.38 MiB/s), 20s
75,160 scanned, 34,722 indexed, 60,079 found, 52,820 compared, 52,820
same data, 2.01 GiB in
(74.4 MiB/s), 29.1 MiB out (1.51 MiB/s), 25s
102,874 scanned, 69,594 indexed, 77,322 found, 67,907 compared, 67,907
same data, 2.36 GiB in
(71.2 MiB/s), 38.3 MiB out (1.85 MiB/s), 30s
110,284 scanned, 69,594 indexed, 89,143 found, 78,952 compared, 78,952
same data, 2.82 GiB in
(92.8 MiB/s), 43.9 MiB out (1.08 MiB/s), 35s
112,108 scanned, 79,575 indexed, 100,228 found, 89,856 compared, 89,856
same data, 3.25 GiB in
(89.3 MiB/s), 49.6 MiB out (1.15 MiB/s), 40s
128,122 scanned, 99,743 indexed, 111,358 found, 98,663 compared, 98,663
same data, 3.80 GiB in
(112 MiB/s), 55.8 MiB out (1.24 MiB/s), 45s
134,630 scanned, 104,738 indexed, 123,253 found, 109,472 compared,
109,472 same data, 4.36 GiB
in (114 MiB/s), 61.7 MiB out (1.16 MiB/s), 50s
134,630 scanned, 119,809 indexed, 133,569 found, 120,008 compared,
120,008 same data, 4.94 GiB
in (115 MiB/s), 67.8 MiB out (1.20 MiB/s), 55s]

Xcp command : xcp verify -nomods <IP address of NFS server>:/source_vol
<IP address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
```

```
verified (data, attrs), 0
different item, 0 error
Speed : 4.95 GiB in (90.5 MiB/s), 69.2 MiB out (1.24 MiB/s)
Total Time : 56s.
STATUS : PASSED
```

**verify-mtimewindow(확인-mtimewindow <s>**

를 사용합니다 `-mtimewindow <s>` 매개 변수 `verify` 확인을 위해 허용되는 수정 시간 차이를 지정하는 명령입니다.

구문

```
xcp verify -mtimewindow <s> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

**예제 보기**

```
[root@localhost linux]# ./xcp verify -mtimewindow 2 <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
06_02.26.03.797492
27,630 scanned, 9,430 found, 5,630 compared, 5,630 same data, 322 MiB
in (64.1 MiB/s), 3.91 MiB
out (798 KiB/s), 5s
38,478 scanned, 19,840 found, 14,776 compared, 14,776 same data, 811
MiB in (97.8 MiB/s), 8.86
MiB out (1012 KiB/s), 10s
55,304 scanned, 14,660 indexed, 29,893 found, 23,904 compared, 23,904
same data, 1.33 GiB in
(109 MiB/s), 14.6 MiB out (1.14 MiB/s), 15s
64,758 scanned, 24,700 indexed, 43,133 found, 36,532 compared, 36,532
same data, 1.65 GiB in
(65.3 MiB/s), 21.0 MiB out (1.28 MiB/s), 20s
75,317 scanned, 34,655 indexed, 56,020 found, 48,942 compared, 48,942
same data, 2.01 GiB in
(72.5 MiB/s), 27.4 MiB out (1.25 MiB/s), 25s
95,024 scanned, 54,533 indexed, 70,675 found, 61,886 compared, 61,886
same data, 2.41 GiB in
(81.3 MiB/s), 34.9 MiB out (1.49 MiB/s), 30s
102,407 scanned, 64,598 indexed, 85,539 found, 76,158 compared, 76,158
same data, 2.74 GiB in
(67.3 MiB/s), 42.0 MiB out (1.42 MiB/s), 35s
113,209 scanned, 74,661 indexed, 97,126 found, 86,525 compared, 86,525
same data, 3.09 GiB in
(72.6 MiB/s), 48.0 MiB out (1.19 MiB/s), 40s
125,040 scanned, 84,710 indexed, 108,480 found, 96,253 compared, 96,253
same data, 3.51 GiB in
(84.0 MiB/s), 53.6 MiB out (1.10 MiB/s), 45s
132,726 scanned, 99,775 indexed, 117,252 found, 103,740 compared,
103,740 same data, 4.04 GiB in
(108 MiB/s), 58.4 MiB out (986 KiB/s), 50s
134,633 scanned, 109,756 indexed, 126,700 found, 112,978 compared,
112,978 same data, 4.52 GiB
in (97.6 MiB/s), 63.6 MiB out (1.03 MiB/s), 55s
134,633 scanned, 129,807 indexed, 134,302 found, 120,779 compared,
120,779 same data, 4.95 GiB
in (86.5 MiB/s), 68.8 MiB out (1.02 MiB/s), 1m0s
Xcp command : xcp verify -mtimewindow 2 <IP address of NFS
```

```
server>:/source_vol <IP address of destination NFS server>:/dest_vol
134,633 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
different item, 0 error
Speed : 4.95 GiB in (83.6 MiB/s), 69.2 MiB out (1.14 MiB/s)
Total Time : 1m0s.
STATUS : PASSED
```

**verify -v 및 verify -l**

를 사용합니다 `-v` 및 `l` 매개 변수 및 `verify` 출력 형식을 검색하고 발견된 차이점을 나열하는 명령입니다.

구문

```
xcp verify -v <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp verify -v <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_02.26.30.055115
32,349 scanned, 10,211 found, 5,946 compared, 5,946 same data, 351 MiB
in (70.1 MiB/s), 4.27 MiB
out (872 KiB/s), 5s
40,301 scanned, 21,943 found, 16,619 compared, 16,619 same data, 874
MiB in (104 MiB/s), 9.74
MiB out (1.09 MiB/s), 10s
52,201 scanned, 14,512 indexed, 33,173 found, 27,622 compared, 27,622
same data, 1.35 GiB in
(102 MiB/s), 16.0 MiB out (1.24 MiB/s), 15s
70,886 scanned, 34,689 indexed, 46,699 found, 40,243 compared, 40,243
same data, 1.77 GiB in
(86.2 MiB/s), 23.3 MiB out (1.47 MiB/s), 20s
80,072 scanned, 39,708 indexed, 63,333 found, 55,743 compared, 55,743
same data, 2.04 GiB in
(55.4 MiB/s), 31.0 MiB out (1.54 MiB/s), 25s
100,034 scanned, 59,615 indexed, 76,848 found, 67,738 compared, 67,738
same data, 2.35 GiB in
(61.6 MiB/s), 37.6 MiB out (1.31 MiB/s), 30s
110,290 scanned, 69,597 indexed, 88,493 found, 78,203 compared, 78,203
same data, 2.75 GiB in
(81.7 MiB/s), 43.4 MiB out (1.14 MiB/s), 35s
116,829 scanned, 79,603 indexed, 102,105 found, 90,998 compared, 90,998
same data, 3.32 GiB in
(117 MiB/s), 50.3 MiB out (1.38 MiB/s), 40s
59
128,954 scanned, 94,650 indexed, 114,340 found, 101,563 compared,
101,563 same data, 3.91 GiB in
(121 MiB/s), 56.8 MiB out (1.30 MiB/s), 45s
134,630 scanned, 109,858 indexed, 125,760 found, 112,077 compared,
112,077 same data, 4.41 GiB
in (99.9 MiB/s), 63.0 MiB out (1.22 MiB/s), 50s
Xcp command : xcp verify -v <IP address of NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
different item, 0 error
Speed : 4.95 GiB in (91.7 MiB/s), 69.2 MiB out (1.25 MiB/s)
Total Time : 55s.
STATUS : PASSED
```
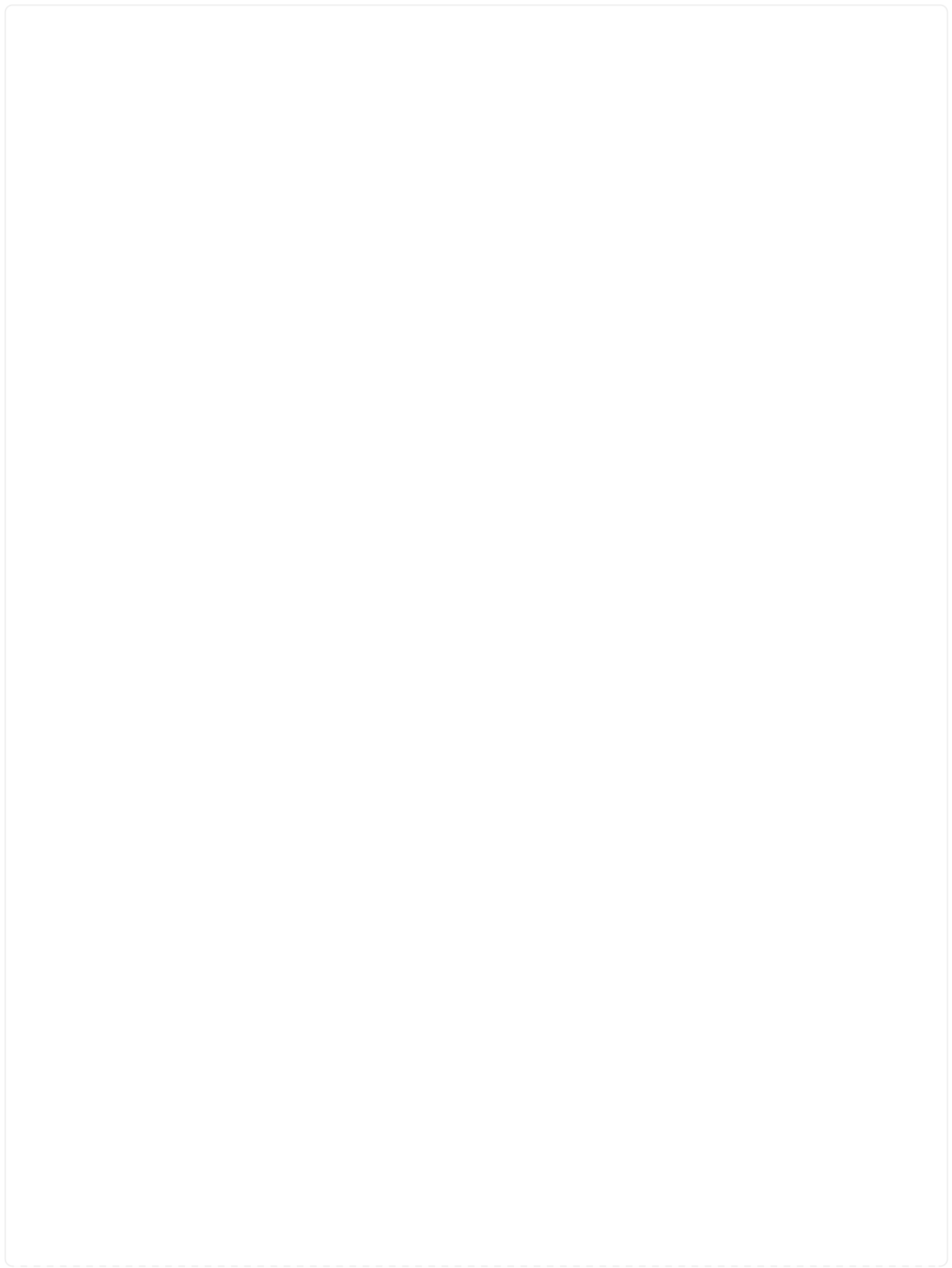
구문

```
xcp verify -l <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
[root@localhost linux]# ./xcp verify -l <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_02.27.58.969228
32,044 scanned, 11,565 found, 7,305 compared, 7,305 same data, 419 MiB
in (83.7 MiB/s), 4.93 MiB
out (1008 KiB/s), 5s
40,111 scanned, 21,352 found, 16,008 compared, 16,008 same data, 942
MiB in (104 MiB/s), 9.64
MiB out (962 KiB/s), 10s
53,486 scanned, 14,677 indexed, 30,840 found, 25,162 compared, 25,162
same data, 1.34 GiB in
(86.4 MiB/s), 15.0 MiB out (1.07 MiB/s), 15s
71,202 scanned, 34,646 indexed, 45,082 found, 38,555 compared, 38,555
same data, 1.72 GiB in
(76.7 MiB/s), 22.5 MiB out (1.51 MiB/s), 20s
75,264 scanned, 34,646 indexed, 60,039 found, 53,099 compared, 53,099
same data, 2.00 GiB in
(58.5 MiB/s), 29.1 MiB out (1.30 MiB/s), 25s
95,205 scanned, 54,684 indexed, 76,004 found, 67,054 compared, 67,054
same data, 2.34 GiB in
(67.5 MiB/s), 37.0 MiB out (1.57 MiB/s), 30s
110,239 scanned, 69,664 indexed, 87,892 found, 77,631 compared, 77,631
same data, 2.78 GiB in
(89.7 MiB/s), 43.2 MiB out (1.23 MiB/s), 35s
115,192 scanned, 79,627 indexed, 100,246 found, 89,450 compared, 89,450
same data, 3.22 GiB in
(90.0 MiB/s), 49.4 MiB out (1.24 MiB/s), 40s
122,694 scanned, 89,740 indexed, 109,158 found, 97,422 compared, 97,422
same data, 3.65 GiB in
(89.4 MiB/s), 54.2 MiB out (978 KiB/s), 45s
134,630 scanned, 104,695 indexed, 119,683 found, 106,036 compared,
106,036 same data, 4.17 GiB
in (105 MiB/s), 59.9 MiB out (1.11 MiB/s), 50s
134,630 scanned, 109,813 indexed, 129,117 found, 115,432 compared,
115,432 same data, 4.59 GiB
in (86.1 MiB/s), 64.7 MiB out (979 KiB/s), 55s
Xcp command : xcp verify -l <IP address of NFS server>:/source_vol <IP
address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
```

```
different item, 0 error
Speed : 4.95 GiB in (84.9 MiB/s), 69.2 MiB out (1.16 MiB/s)
Total Time : 59s.
STATUS : PASSED
```

구문

```
xcp verify -v -l <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
[root@localhost linux]# ./xcp verify -v -l <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_02.30.00.952454
24,806 scanned, 8,299 found, 4,817 compared, 4,817 same data, 296 MiB
in (59.1 MiB/s), 3.44 MiB
out (704 KiB/s), 5s
39,720 scanned, 20,219 found, 14,923 compared, 14,923 same data, 716
MiB in (84.0 MiB/s), 8.78
MiB out (1.07 MiB/s), 10s
44,395 scanned, 9,648 indexed, 29,851 found, 24,286 compared, 24,286
same data, 1.20 GiB in (102
MiB/s), 14.0 MiB out (1.05 MiB/s), 15s
62,763 scanned, 24,725 indexed, 40,946 found, 34,760 compared, 34,760
same data, 1.69 GiB in
(101 MiB/s), 20.2 MiB out (1.24 MiB/s), 20s
76,181 scanned, 39,708 indexed, 57,566 found, 50,595 compared, 50,595
same data, 1.98 GiB in
(58.7 MiB/s), 28.3 MiB out (1.61 MiB/s), 25s
90,411 scanned, 49,594 indexed, 73,357 found, 64,912 compared, 64,912
same data, 2.37 GiB in
(79.0 MiB/s), 35.8 MiB out (1.48 MiB/s), 30s

110,222 scanned, 69,593 indexed, 87,733 found, 77,466 compared, 77,466
same data, 2.77 GiB in
(80.5 MiB/s), 43.1 MiB out (1.45 MiB/s), 35s
116,417 scanned, 79,693 indexed, 100,053 found, 89,258 compared, 89,258
same data, 3.23 GiB in
(94.3 MiB/s), 49.4 MiB out (1.26 MiB/s), 40s
122,224 scanned, 89,730 indexed, 111,684 found, 100,059 compared,
100,059 same data, 3.83 GiB in
(123 MiB/s), 55.5 MiB out (1.22 MiB/s), 45s
134,630 scanned, 109,758 indexed, 121,744 found, 108,152 compared,
108,152 same data, 4.36 GiB
in (107 MiB/s), 61.3 MiB out (1.14 MiB/s), 50s
134,630 scanned, 119,849 indexed, 131,678 found, 118,015 compared,
118,015 same data, 4.79 GiB
in (87.2 MiB/s), 66.7 MiB out (1.08 MiB/s), 55s
Xcp command : xcp verify -v -l <IP address of NFS server>:/source_vol
<IP address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
```

```
different item, 0 error
Speed : 4.95 GiB in (87.6 MiB/s), 69.2 MiB out (1.20 MiB/s)
Total Time : 57s.
STATUS : PASSED
```

**Verify -** 이름 없음

를 사용합니다 -nonames 매개 변수 verify 파일 목록 또는 보고서에서 사용자 및 그룹 이름을 제외하는 명령입니다

구문

```
xcp verify -nonames <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp verify -nonames <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_04.03.58.173082
30,728 scanned, 9,242 found, 5,248 compared, 5,248 same data, 363 MiB
in (72.6 MiB/s), 3.93 MiB
out (805 KiB/s), 5s
40,031 scanned, 20,748 found, 15,406 compared, 15,406 same data, 837
MiB in (94.5 MiB/s), 9.19
MiB out (1.05 MiB/s), 10s
50,859 scanned, 9,668 indexed, 32,410 found, 26,305 compared, 26,305
same data, 1.30 GiB in
(99.5 MiB/s), 15.2 MiB out (1.20 MiB/s), 15s
73,631 scanned, 34,712 indexed, 45,362 found, 38,567 compared, 38,567
same data, 1.75 GiB in
(92.2 MiB/s), 22.6 MiB out (1.49 MiB/s), 20s
82,931 scanned, 44,618 indexed, 59,988 found, 52,270 compared, 52,270
same data, 2.08 GiB in
(66.7 MiB/s), 29.6 MiB out (1.39 MiB/s), 25s
96,691 scanned, 59,630 indexed, 77,567 found, 68,573 compared, 68,573
same data, 2.50 GiB in
(85.2 MiB/s), 38.2 MiB out (1.73 MiB/s), 30s
110,763 scanned, 74,678 indexed, 92,246 found, 82,010 compared, 82,010
same data, 2.93 GiB in
(88.8 MiB/s), 45.5 MiB out (1.45 MiB/s), 35s
120,101 scanned, 79,664 indexed, 105,420 found, 94,046 compared, 94,046
same data, 3.47 GiB in
(110 MiB/s), 51.9 MiB out (1.27 MiB/s), 40s
131,659 scanned, 99,780 indexed, 116,418 found, 103,109 compared,
103,109 same data, 4.05 GiB in
(120 MiB/s), 58.1 MiB out (1.25 MiB/s), 45s
134,630 scanned, 114,770 indexed, 127,154 found, 113,483 compared,
113,483 same data, 4.54 GiB
in (100 MiB/s), 64.1 MiB out (1.20 MiB/s), 50s
Xcp command : xcp verify -nonames <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
different item, 0 error
Speed : 4.95 GiB in (92.5 MiB/s), 69.2 MiB out (1.26 MiB/s)
Total Time : 54s.
STATUS : PASSED
```

**Verify - <filter>를 일치시킵니다**

를 사용합니다 `-match <filter>` 매개 변수 `verify` 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

구문

```
xcp verify -match bin <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp verify -match bin <IP address of NFS
server>:/source_vol <IP address
of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_04.16.46.005121
32,245 scanned, 25,000 matched, 10,657 found, 6,465 compared, 6,465
same data, 347 MiB in (69.4
MiB/s), 4.44 MiB out (908 KiB/s), 5s
40,306 scanned, 35,000 matched, 21,311 found, 15,969 compared, 15,969
same data, 850 MiB in (101
MiB/s), 9.44 MiB out (1024 KiB/s), 10s
55,582 scanned, 45,000 matched, 14,686 indexed, 31,098 found, 25,293
compared, 25,293 same data,
1.33 GiB in (102 MiB/s), 15.1 MiB out (1.12 MiB/s), 15s
75,199 scanned, 65,000 matched, 34,726 indexed, 45,587 found, 38,738
compared, 38,738 same data,
1.72 GiB in (77.9 MiB/s), 22.7 MiB out (1.52 MiB/s), 20s
78,304 scanned, 70,000 matched, 39,710 indexed, 61,398 found, 54,232
compared, 54,232 same data,
2.08 GiB in (75.0 MiB/s), 30.0 MiB out (1.45 MiB/s), 25s
102,960 scanned, 95,000 matched, 69,682 indexed, 78,351 found, 69,034
compared, 69,034 same
data, 2.43 GiB in (71.9 MiB/s), 38.8 MiB out (1.76 MiB/s), 30s
110,344 scanned, 105,000 matched, 69,682 indexed, 93,873 found, 83,637
compared, 83,637 same
data, 2.85 GiB in (84.2 MiB/s), 45.6 MiB out (1.36 MiB/s), 35s
121,459 scanned, 120,000 matched, 84,800 indexed, 107,012 found, 95,357
compared, 95,357 same
data, 3.30 GiB in (92.8 MiB/s), 52.3 MiB out (1.33 MiB/s), 40s
130,006 scanned, 125,000 matched, 94,879 indexed, 115,077 found,
102,104 compared, 102,104 same
data, 3.97 GiB in (136 MiB/s), 57.2 MiB out (1001 KiB/s), 45s
134,630 scanned, 134,630 matched, 109,867 indexed, 125,755 found,
112,025 compared, 112,025 same
data, 4.53 GiB in (115 MiB/s), 63.2 MiB out (1.20 MiB/s), 50s
Xcp command : xcp verify -match bin <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol
134,630 scanned, 134,630 matched, 100% found (121,150 have data), 100%
verified (data, attrs,
mods), 0 different item, 0 error
Speed : 4.95 GiB in (92.2 MiB/s), 69.2 MiB out (1.26 MiB/s)
Total Time : 54s.
STATUS : PASSED
```
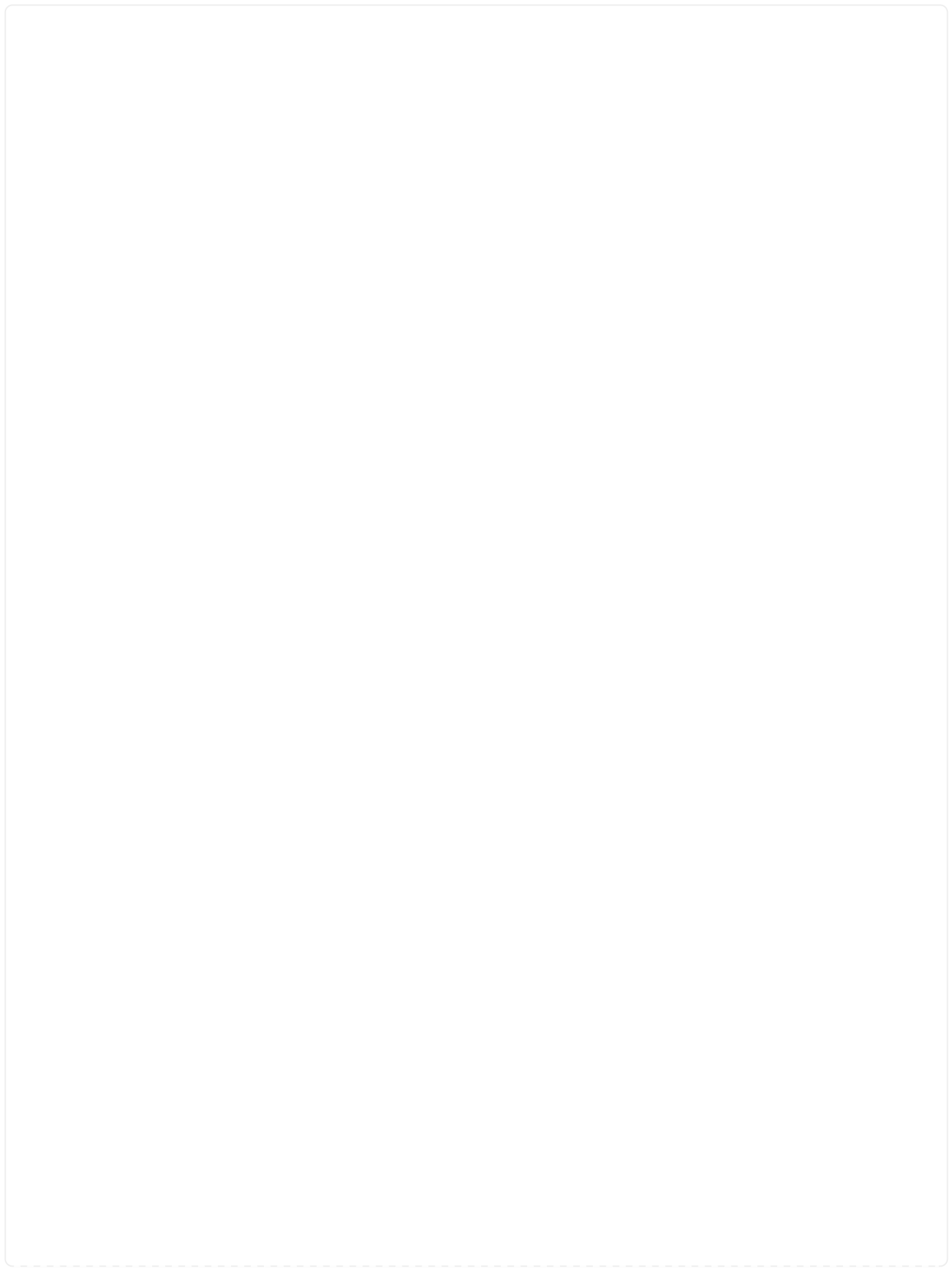
## 확인 - BS **&lt;n&gt;**

를 사용합니다 `-bs` `<n>` 매개 변수 `verify` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp verify -bs 32k  <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
[root@localhost linux]# ./xcp verify -bs 32k <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_04.20.19.266399
29,742 scanned, 9,939 found, 5,820 compared, 5,820 same data, 312 MiB
in (62.3 MiB/s), 4.58 MiB
out (938 KiB/s), 5s
40,156 scanned, 20,828 found, 15,525 compared, 15,525 same data, 742
MiB in (85.0 MiB/s), 10.2
MiB out (1.10 MiB/s), 10s
41,906 scanned, 9,846 indexed, 30,731 found, 25,425 compared, 25,425
same data, 1.14 GiB in
(85.6 MiB/s), 16.1 MiB out (1.18 MiB/s), 15s
66,303 scanned, 29,712 indexed, 42,861 found, 36,708 compared, 36,708
same data, 1.61 GiB in
(94.9 MiB/s), 23.7 MiB out (1.53 MiB/s), 20s
70,552 scanned, 34,721 indexed, 58,157 found, 51,528 compared, 51,528
same data, 1.96 GiB in
(73.0 MiB/s), 31.4 MiB out (1.53 MiB/s), 25s
100,135 scanned, 59,611 indexed, 76,047 found, 66,811 compared, 66,811
same data, 2.29 GiB in
(66.3 MiB/s), 40.7 MiB out (1.82 MiB/s), 30s
105,951 scanned, 69,665 indexed, 90,022 found, 80,330 compared, 80,330
same data, 2.71 GiB in
(85.3 MiB/s), 48.1 MiB out (1.49 MiB/s), 35s
113,440 scanned, 89,486 indexed, 101,634 found, 91,152 compared, 91,152
same data, 3.19 GiB in
(97.8 MiB/s), 55.4 MiB out (1.45 MiB/s), 40s
128,693 scanned, 94,484 indexed, 109,999 found, 97,319 compared, 97,319
same data, 3.59 GiB in
(82.6 MiB/s), 60.2 MiB out (985 KiB/s), 45s
134,630 scanned, 94,484 indexed, 119,203 found, 105,402 compared,
105,402 same data, 3.98 GiB in
(78.3 MiB/s), 65.1 MiB out (986 KiB/s), 50s
134,630 scanned, 104,656 indexed, 127,458 found, 113,774 compared,
113,774 same data, 4.49 GiB
in (103 MiB/s), 70.8 MiB out (1.15 MiB/s), 55s
Xcp command : xcp verify -bs 32k <IP address of NFS server>:/source_vol
<IP address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
```

```
different item, 0 error
Speed : 4.96 GiB in (84.5 MiB/s), 77.5 MiB out (1.29 MiB/s)
Total Time : 1m0s.
STATUS : PASSED
```

**Verify - 병렬 <n>**

를 사용합니다 `-parallel <n>` 매개 변수 `verify` 최대 동시 배치 프로세스 수를 지정하는 명령입니다.

구문

```
xcp verify -parallel <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
[root@localhost linux]# ./xcp verify -parallel 2 <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_04.35.10.356405
15,021 scanned, 6,946 found, 4,869 compared, 4,869 same data, 378 MiB
in (74.5 MiB/s), 3.24 MiB
out (654 KiB/s), 5s
25,165 scanned, 9,671 indexed, 15,945 found, 12,743 compared, 12,743
same data, 706 MiB in (65.4
MiB/s), 7.81 MiB out (934 KiB/s), 10s
35,367 scanned, 19,747 indexed, 24,036 found, 19,671 compared, 19,671
same data, 933 MiB in
(45.3 MiB/s), 11.9 MiB out (827 KiB/s), 15s
45,267 scanned, 29,761 indexed, 32,186 found, 26,909 compared, 26,909
same data, 1.38 GiB in
(94.6 MiB/s), 16.5 MiB out (943 KiB/s), 20s
55,690 scanned, 39,709 indexed, 40,413 found, 34,805 compared, 34,805
same data, 1.69 GiB in
(62.8 MiB/s), 20.9 MiB out (874 KiB/s), 25s
55,690 scanned, 39,709 indexed, 48,325 found, 42,690 compared, 42,690
same data, 1.88 GiB in
(38.1 MiB/s), 24.3 MiB out (703 KiB/s), 31s
65,002 scanned, 49,670 indexed, 57,872 found, 51,891 compared, 51,891
same data, 2.04 GiB in
(33.2 MiB/s), 29.0 MiB out (967 KiB/s), 36s
75,001 scanned, 59,688 indexed, 66,789 found, 60,291 compared, 60,291
same data, 2.11 GiB in
(14.8 MiB/s), 33.4 MiB out (883 KiB/s), 41s
85,122 scanned, 69,690 indexed, 75,009 found, 67,337 compared, 67,337
same data, 2.42 GiB in
(62.3 MiB/s), 37.6 MiB out (862 KiB/s), 46s
91,260 scanned, 79,686 indexed, 82,097 found, 73,854 compared, 73,854
same data, 2.69 GiB in
(55.0 MiB/s), 41.4 MiB out (770 KiB/s), 51s
95,002 scanned, 79,686 indexed, 88,238 found, 79,707 compared, 79,707
same data, 2.99 GiB in
(60.7 MiB/s), 44.4 MiB out (608 KiB/s), 56s
105,002 scanned, 89,787 indexed, 96,059 found, 86,745 compared, 86,745
same data, 3.19 GiB in
(41.3 MiB/s), 48.4 MiB out (810 KiB/s), 1m1s
110,239 scanned, 99,872 indexed, 104,757 found, 94,652 compared, 94,652
```

```
same data, 3.47 GiB in
(57.0 MiB/s), 52.7 MiB out (879 KiB/s), 1m6s
120,151 scanned, 104,848 indexed, 111,491 found, 100,317 compared,
100,317 same data, 3.95 GiB
in (97.2 MiB/s), 56.3 MiB out (733 KiB/s), 1m11s
130,068 scanned, 114,860 indexed, 119,867 found, 107,260 compared,
107,260 same data, 4.25 GiB
in (60.5 MiB/s), 60.6 MiB out (871 KiB/s), 1m16s
134,028 scanned, 119,955 indexed, 125,210 found, 111,886 compared,
111,886 same data, 4.65 GiB
in (83.2 MiB/s), 63.7 MiB out (647 KiB/s), 1m21s
134,630 scanned, 129,929 indexed, 132,679 found, 119,193 compared,
119,193 same data, 4.93 GiB
in (56.8 MiB/s), 67.9 MiB out (846 KiB/s), 1m26s
Xcp command : xcp verify -parallel 2 <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
different item, 0 error
```

**verify-dircount <n[k]> 를 참조하십시오**

를 사용합니다 `-dircount <n[k]>` 매개 변수 `verify` 명령을 사용하여 디렉토리를 읽을 때 요청 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp verify -dircount <n[k]> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
[root@localhost linux]# ./xcp verify -dircount 32k <IP address of NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
autoname_verify_2020-03-
05_04.28.58.235953
32,221 scanned, 10,130 found, 5,955 compared, 5,955 same data, 312 MiB
in (62.1 MiB/s), 4.15 MiB
out (848 KiB/s), 5s
40,089 scanned, 21,965 found, 16,651 compared, 16,651 same data, 801
MiB in (97.5 MiB/s), 9.55
MiB out (1.07 MiB/s), 10s

51,723 scanned, 14,544 indexed, 33,019 found, 27,288 compared, 27,288
same data, 1.24 GiB in
(93.8 MiB/s), 15.6 MiB out (1.22 MiB/s), 15s
67,360 scanned, 34,733 indexed, 45,615 found, 39,341 compared, 39,341
same data, 1.73 GiB in
(100 MiB/s), 22.8 MiB out (1.43 MiB/s), 20s
82,314 scanned, 44,629 indexed, 63,276 found, 55,559 compared, 55,559
same data, 2.05 GiB in
(64.7 MiB/s), 31.0 MiB out (1.63 MiB/s), 25s
100,085 scanned, 59,585 indexed, 79,799 found, 70,618 compared, 70,618
same data, 2.43 GiB in
(77.2 MiB/s), 38.9 MiB out (1.57 MiB/s), 30s
110,158 scanned, 69,651 indexed, 93,005 found, 82,654 compared, 82,654
same data, 2.87 GiB in
(89.1 MiB/s), 45.4 MiB out (1.28 MiB/s), 35s
120,047 scanned, 79,641 indexed, 104,539 found, 93,226 compared, 93,226
same data, 3.40 GiB in
(108 MiB/s), 51.4 MiB out (1.20 MiB/s), 40s
130,362 scanned, 94,662 indexed, 114,193 found, 101,230 compared,
101,230 same data, 3.87 GiB in
(97.3 MiB/s), 56.7 MiB out (1.06 MiB/s), 45s
134,630 scanned, 104,789 indexed, 124,272 found, 110,547 compared,
110,547 same data, 4.33 GiB
in (94.2 MiB/s), 62.3 MiB out (1.12 MiB/s), 50s
134,630 scanned, 129,879 indexed, 133,227 found, 119,717 compared,
119,717 same data, 4.93 GiB
in (119 MiB/s), 68.2 MiB out (1.17 MiB/s), 55s
Xcp command : xcp verify -dircount 32k <IP address of NFS
server>:/source_vol <IP address ofdestination NFS server>:/dest_vol
134,630 scanned, 0 matched, 100% found (121,150 have data), 100%
verified (data, attrs, mods), 0
```

```
different item, 0 error
Speed : 4.95 GiB in (89.3 MiB/s), 69.2 MiB out (1.22 MiB/s)
Total Time : 56s.
STATUS : PASSED
```

**noid**를 확인합니다

를 사용합니다 `-noId` 매개 변수 `verify` 기본 인덱스 생성을 사용하지 않도록 설정하는 명령입니다. 기본값은 false 입니다.

구문

```
xcp verify -noId <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@localhost linux]# ./xcp verify -noid <IP address of source NFS
server>:/source_vol <IP address of destination NFS server>:/dest_vol

Job ID: Job_2024-04-22_07.19.41.825308_verify
 49,216 scanned, 10,163 found, 9,816 compared, 9.59 KiB same data, 1.15
GiB in (234 MiB/s), 5.67 MiB out (1.13 MiB/s), 6s
 49,615 scanned, 4,958 indexed, 27,018 found, 26,534 compared, 25.9 KiB
same data, 3.08 GiB in (390 MiB/s), 15.1 MiB out (1.86 MiB/s), 11s
 73,401 scanned, 34,884 indexed, 46,365 found, 45,882 compared, 44.8
KiB same data, 5.31 GiB in (420 MiB/s), 26.6 MiB out (2.12 MiB/s), 16s
 80,867 scanned, 44,880 indexed, 63,171 found, 62,704 compared, 61.2
KiB same data, 7.23 GiB in (377 MiB/s), 36.2 MiB out (1.83 MiB/s), 21s
 83,102 scanned, 69,906 indexed, 79,587 found, 79,246 compared, 77.4
KiB same data, 9.13 GiB in (387 MiB/s), 46.0 MiB out (1.95 MiB/s), 26s

Xcp command : xcp verify 10.235.122.70:/source_vol
10.235.122.86:/dest_vol
Stats       : 83,102 scanned, 83,102 indexed, 100% found (82,980 have
data), 82,980 compared, 100% verified (data, attrs, mods)
Speed       : 9.55 GiB in (347 MiB/s), 48.4 MiB out (1.72 MiB/s)
Total Time  : 28s.
Job ID      : Job_2024-04-22_07.19.41.825308_verify
Log Path    : /opt/NetApp/xFiles/xcp/xcplogs/Job_2024-04-
22_07.19.41.825308_verify.log
STATUS      : PASSED
```

**verify-preserve-atime** 을 참조하십시오

를 사용합니다 `-preserve-atime` 매개 변수 `verify` 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복구하는 명령입니다. 를 클릭합니다 `-preserve-atime` 매개 변수는 액세스 시간을 XCP 읽기 작업 전에 설정된 원래 값으로 재설정합니다.

구문

```
xcp verify -preserve-atime <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@client1 linux]# ./xcp verify -preserve-atime
<IP_address>:/source_vol <destination_IP_address>:/dest_vol

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2022-06-
30_15.29.03.686503
xcp: Job ID: Job_2022-06-30_15.29.03.723260_verify
Xcp command : xcp verify -preserve-atime <IP_address>:/source_vol
<destination_IP_address>:/dest_vol Stats :
110 scanned, 110 indexed, 100% found (96 have data), 96 compared, 100%
verified (data, attrs,
mods)
Speed : 4.87 MiB in (3.02 MiB/s), 160 KiB out (99.4 KiB/s) Total Time :
1s.
Job ID : Job_2022-06-30_15.29.03.723260_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2022-06-
30_15.29.03.723260_verify.log STATUS :
PASSED
```

**-s3.insecure** 확인합니다

를 사용합니다 `-s3.insecure` 매개 변수 `verify` S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 명령

구문

```
xcp verify -s3.insecure hdfs:///user/test s3://<bucket_name>
```

예제 보기

```
[root@client1 linux]# ./xcp verify -s3.insecure hdfs://<HDFS source>
s3://<s3-bucket>

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2023-06-
08_09.04.33.301709
Job ID: Job_2023-06-08_09.04.33.301709_verify
Xcp command : xcp verify -s3.insecure hdfs://<HDFS source> s3://<s3-
bucket>
Stats : 8 scanned, 8 indexed, 100% found (5 have data), 5 compared,
100% verified (data)
Speed : 21.3 KiB in (8.20 KiB/s), 90.8 KiB out (34.9 KiB/s)
Total Time : 2s.
Job ID : Job_2023-06-08_09.04.33.301709_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_09.04.33.301709_verify.log
STATUS : PASSED
```

**verify-s3.endpoint <s3_endpoint_url>**

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수 `verify` S3 버킷 통신을 위해 지정된 URL로
기본 AWS 끝점 URL을 재정의하는 명령입니다.

구문

```
xcp verify -s3.endpoint https://<endpoint_url>: s3://<bucket_name>
```

예제 보기

```
[root@client1 linux]# ./xcp verify -s3.endpoint https://<endpoint_url>
hdfs://<HDFS source> s3://<s3-bucket>

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2023-06-
13_11.20.48.203492
Job ID: Job_2023-06-13_11.20.48.203492_verify
2 scanned, 2 found, 9.55 KiB in (1.90 KiB/s), 12.5 KiB out (2.50
KiB/s), 5s
Xcp command : xcp verify -s3.endpoint https://<endpoint_url>
hdfs://<HDFS source> s3://<s3-bucket>
Stats : 8 scanned, 8 indexed, 100% found (5 have data), 5 compared,
100% verified (data)
Speed : 21.3 KiB in (2.28 KiB/s), 91.1 KiB out (9.72 KiB/s)
Total Time : 9s.
Job ID : Job_2023-06-13_11.20.48.203492_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_11.20.48.203492_verify.log
STATUS : PASSED
```

**-s3.profile <name>**를 확인합니다

를 사용합니다 `s3.profile` 매개 변수 `verify` S3 버킷 통신에 사용할 AWS 자격 증명 파일에서 프로필을 지정하는 명령

구문

```
xcp verify -s3.profile <name> -s3.endpoint https://<endpoint_url>:
s3://<bucket_name>
```

예제 보기

```
[root@client1 linux]# ./xcp verify -s3.profile sg -s3.endpoint
https://<endpoint_url> hdfs://<HDFS source> s3://<s3-bucket>

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2023-06-
08_09.05.22.412914
Job ID: Job_2023-06-08_09.05.22.412914_verify
Xcp command : xcp verify -s3.profile sg -s3.endpoint
https://<endpoint_url> hdfs://<HDFS source> s3://<s3-bucket>
Stats : 8 scanned, 8 indexed, 100% found (5 have data), 5 compared,
100% verified (data)
Speed : 21.3 KiB in (6.52 KiB/s), 91.2 KiB out (27.9 KiB/s)
Total Time : 3s.
Job ID : Job_2023-06-08_09.05.22.412914_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_09.05.22.412914_verify.log
STATUS : PASSED
[root@client1 linux]# ./xcp verify -s3.profile sg -s3.endpoint
https://<endpoint_url> hdfs://<HDFS source> s3://<s3-bucket>

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2023-06-
08_09.20.53.763772
Job ID: Job_2023-06-08_09.20.53.763772_verify
Xcp command : xcp verify -s3.profile sg -s3.endpoint
https://<endpoint_url>
hdfs://<HDFS source> s3://<s3-bucket>
Stats : 8 scanned, 8 indexed, 100% found (5 have data), 5 compared,
100% verified (data)
Speed : 25.3 KiB in (14.5 KiB/s), 93.7 KiB out (53.8 KiB/s)
Total Time : 1s.
Job ID : Job_2023-06-08_09.20.53.763772_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_09.20.53.763772_verify.log
STATUS : PASSED
```

**-s3.noverify 확인합니다**

를 사용합니다 `-s3.noverify` 매개 변수 `verify` S3 버킷 통신에 대한 SSL 인증의 기본 검증을 재정의하는
명령입니다.

구문

```
xcp verify -s3.noverify s3://<bucket_name>
```

**예제 보기**

```
[root@client1 linux]# ./xcp verify -s3.noverify hdfs://<HDFS source>
s3://<s3-bucket>

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2023-06-
13_10.59.01.817044
Job ID: Job_2023-06-13_10.59.01.817044_verify
Xcp command : xcp verify -s3.noverify hdfs://<HDFS source> s3://<s3-
bucket>
Stats : 8 scanned, 8 indexed, 100% found (5 have data), 5 compared,
100% verified (data)
Speed : 21.3 KiB in (5.84 KiB/s), 90.8 KiB out (24.9 KiB/s)
Total Time : 3s.
Job ID : Job_2023-06-13_10.59.01.817044_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_10.59.01.817044_verify.log
STATUS : PASSED

./xcp verify -s3.profile sg -s3.noverify -s3.endpoint
https://<endpoint_url> hdfs://<HDFS source> s3://<s3-bucket>

xcp: WARNING: No index name has been specified, creating one with name:
XCP_verify_2023-06-
13_11.29.00.543286
Job ID: Job_2023-06-13_11.29.00.543286_verify
15,009 scanned, 9 indexed, 1,194 found, 908 compared, 908 same data,
4.87 MiB in (980 KiB/s), 199 KiB
out (39.1 KiB/s), 5s
15,009 scanned, 9 indexed, 2,952 found, 2,702 compared, 2.64 KiB same
data, 8.56 MiB in (745 KiB/s),
446 KiB out (48.7 KiB/s), 10s
15,009 scanned, 9 indexed, 4,963 found, 4,841 compared, 4.73 KiB same
data, 12.9 MiB in (873 KiB/s),
729 KiB out (55.9 KiB/s), 15s
15,009 scanned, 9 indexed, 6,871 found, 6,774 compared, 6.62 KiB same
data, 16.9 MiB in (813 KiB/s),
997 KiB out (53.4 KiB/s), 20s
15,009 scanned, 9 indexed, 8,653 found, 8,552 compared, 8.35 KiB same
data, 20.6 MiB in (745 KiB/s),
1.22 MiB out (49.3 KiB/s), 25s
15,009 scanned, 9 indexed, 10,436 found, 10,333 compared, 10.1 KiB same
data, 24.3 MiB in (754
KiB/s), 1.46 MiB out (49.8 KiB/s), 31s
15,009 scanned, 9 indexed, 12,226 found, 12,114 compared, 11.8 KiB same
```

```
data, 28.0 MiB in (751
KiB/s), 1.71 MiB out (49.7 KiB/s), 36s
15,009 scanned, 9 indexed, 14,005 found, 13,895 compared, 13.6 KiB same
data, 31.7 MiB in (756
KiB/s), 1.95 MiB out (50.0 KiB/s), 41s
15,009 scanned, 9 indexed, 14,229 found, 14,067 compared, 13.7 KiB same
data, 32.2 MiB in (102
KiB/s), 1.98 MiB out (6.25 KiB/s), 46s
Xcp command : xcp verify -s3.profile sg -s3.noverify -s3.endpoint
https://<endpoint_url> <HDFS source> s3://<s3-bucket>
Stats : 15,009 scanned, 15,009 indexed, 100% found (15,005 have data),
15,005 compared, 100%
verified (data)
Speed : 33.9 MiB in (724 KiB/s), 2.50 MiB out (53.5 KiB/s)
Total Time : 47s.
Job ID : Job_2023-06-13_11.29.00.543286_verify
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_11.29.00.543286_verify.log
STATUS : PASSED
```

## chmod 를 클릭합니다

xCP NFS입니다 chmod 명령은 지정된 디렉토리 구조에 대한 모든 파일의 파일 권한을 검사하고
변경합니다. 'chmod' 명령에는 모드 또는 참조, NFS 공유 또는 POSIX 경로가 변수로
필요합니다. xCP입니다 chmod 명령은 지정된 경로에 대한 사용 권한을 반복적으로 변경합니다.
명령 출력에는 스캔된 총 파일과 출력에서 변경된 권한이 표시됩니다.

구문

```
xcp chmod -mode <value> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chmod -mode <IP address>:/source_vol

Xcp command : xcp chmod -mode <IP address>://source_vol
Stats : 6 scanned, 4 changed mode
Speed : 1.96 KiB in (2.13 KiB/s), 812 out (882/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux] #
```

다음 표에는 가 나열되어 있습니다 chmod 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<nfs_chmod_exclude,chmod-제외();필터(); | 필터와 일치하는 파일 및 디렉토리를 제외합니다. |
| <<nfs_chmod_match,chmod-match | 필터와 일치하는 파일 및 디렉토리만 처리합니다. |
| <<nfs_chmod_reference,chmod-참조();참조(); | 참조된 파일 또는 디렉터리 지점을 지정합니다. |
| chmod -v 를 입력합니다 | 처리된 모든 개체에 대한 출력을 보고합니다. |

**chmod - <filter> 제외**

를 사용합니다 -exclude <filter> 매개 변수 chmod 필터와 일치하는 파일 및 디렉토리를 제외하는 명령입니다.

구문

```
xcp chmod -exclude <filter> -mode <value> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chmod -exclude "fnm('3.img')" -mode 770
101.11.10.10:/s_v1/D3/

Excluded: 1 excluded, 0 did not match exclude criteria
Xcp command : xcp chmod -exclude fnm('3.img') -mode 770
101.11.10.10:/s_v1/D3/
Stats : 5 scanned, 1 excluded, 5 changed mode
Speed : 2.10 KiB in (7.55 KiB/s), 976 out (3.43 KiB/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

**chmod - <filter> 일치**

를 사용합니다 -match <filter> 매개 변수 chmod 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

구문

```
xcp chmod -match <filter>  -mode <value> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chmod -match "fnm('2.img')" -mode 777
101.11.10.10:/s_v1/D2/

Filtered: 1 matched, 5 did not match
Xcp command : xcp chmod -match fnm('2.img') -mode
101.11.10.10:/s_v1/D2/
Stats : 6 scanned, 1 matched, 2 changed mode
Speed : 1.67 KiB in (1.99 KiB/s), 484 out (578/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]
```

**chmod - 참조 \<reference\>**

를 사용합니다 `-reference <reference>` 매개 변수 `chmod` 참조된 파일 또는 디렉토리 지점을 지정하는 명령입니다.

구문

```
xcp chmod -reference <reference> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chmod -reference 101.11.10.10:/s_v1/D1/1.txt
102.21.10.10:/s_v1/D2/

Xcp command : xcp chmod -reference 101.11.10.10:/s_v1/D1/1.txt
102.21.10.10:/s_v1/D2/
Stats : 6 scanned, 6 changed mode
Speed : 3.11 KiB in (3.15 KiB/s), 1.98 KiB out (2.00 KiB/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

**chmod -v 를 입력합니다**

를 사용합니다 `-v` 매개 변수 `chmod` 명령을 사용하여 처리된 모든 개체에 대한 출력을 보고합니다.

```
chmod -mode <value> -v <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chmod -mode 111 -v file:///mnt/s_v1/D1/

mode of 'file:///mnt/s_v1/D1' changed from 0777 to 0111
mode of 'file:///mnt/s_v1/D1/1.txt' changed from 0777 to 0111
mode of 'file:///mnt/s_v1/D1/softlink_1.img' changed from 0777 to 0111
mode of 'file:///mnt/s_v1/D1/softlink_to_hardlink_1.img' changed from
0777 to 0111 mode
of 'file:///mnt/s_v1/D1/1.img' changed from 0777 to 0111
mode of 'file:///mnt/s_v1/D1/hardlink_1.img' changed from 0777 to 0111
mode of
'file:///mnt/s_v1/D1/1.img1' changed from 0777 to 0111
Xcp command : xcp chmod -mode 111 -v file:///mnt/s_v1/D1/ Stats : 7
scanned, 7
changed mode
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

## 샤운

xCP NFS입니다 chown 명령은 지정된 디렉토리 구조에 대한 모든 파일의 소유권을 검사하고 변경합니다. 를 클릭합니다 chown 명령을 실행하려면 NFS 공유 또는 POSIX 경로가 변수로 필요합니다. XCP chown은 지정된 경로에 대한 소유권을 재귀적으로 변경합니다. 를 클릭합니다 chown Command는 파일의 변경된 UID(사용자 ID)를 표시합니다.

구문

```
xcp chown -user/-group <user-name/group-name> <source NFS export path>
```

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예제 보기

```
[root@user-1 linux]# ./xcp chown -user user2 -v
101.101.10.110:/s_v1/smaple_set/D1

Sat Apr 2 23:06:05 2022
changed ownership of 101.101.10.110:/s_v1/smaple_set/D1 from 1001:0 to
1004:0
changed ownership of 101.101.10.110:/s_v1/smaple_set/D1/1.txt from
1001:0 to 1004:0
changed ownership of 101.101.10.110:/s_v1/smaple_set/D1/softlink_1.img
from 1001:0 to 1004:0
changed ownership of 101.101.10.110:/s_v1/smaple_set/D1/1.img from
1001:0 to 1004:0
changed ownership of 101.101.10.110:/s_v1/smaple_set/D1/hardlink_1.img
from 1001:0 to 1004:0
changed ownership of
101.101.10.110:/s_v1/smaple_set/D1/softlink_to_hardlink_1.img from
1001:0 to
1004:0
Xcp command : xcp chown -user user2 -v
101.101.10.110:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 2.25 KiB in (1.82 KiB/s), 1.11 KiB out (923/s)
Total Time : 1s.
STATUS : PASSED
[root@user-1 linux]#
```

다음 표에는 가 나열되어 있습니다 chown 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<nfs_chown_exclude,채널 - 제외(); 필터(); | 필터와 일치하는 파일 및 디렉터리를 제외합니다. |
| <<nfs_chown_match,채널 일치();필터(); | 필터와 일치하는 파일 및 디렉터리만 처리합니다. |
| <<nfs_chown_group,채널 그룹();그룹(); | 소스에서 Linux GID(Group ID)를 설정합니다. |
| <<nfs_chown_user,채널 사용자();사용자(); | 소스에서 Linux UID를 설정합니다. |
| <<nfs_chown_user_from,chown-user-from 채널 사용자 - 원본(); | UID를 변경합니다. |
| <<nfs_chown_group_from,chown-group-from 채널-그룹-시작 | GID를 변경합니다. |
| <<nfs_chown_reference,채널 - 참조(); 참조(); | 참조된 파일 또는 디렉터리 지점을 지정합니다. |
| 채널 - v | 처리된 모든 개체에 대한 출력을 보고합니다. |

**chown - <filter> 제외**

를 사용합니다 `-exclude <filter>` 매개 변수 chown 필터와 일치하는 파일 및 디렉토리를 제외하는 명령입니다.

구문

```
xcp chown -exclude <filter> -user <user_name> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -exclude "fnm('1.img')" -user user2
101.101.10.210:/s_v1/smaple_set/D1

Excluded: 1 excluded, 0 did not match exclude criteria
Xcp command : xcp chown -exclude fnm('1.img') -user
user2101.101.10.210:/s_v1/smaple_set/D1
Stats : 5 scanned, 1 excluded, 5 changed ownership
Speed : 2.10 KiB in (1.75 KiB/s), 976 out (812/s)
Total Time : 1s.
STATUS : PASSED
[root@user-1 linux]#
```

**Chown - <filter> 일치**

를 사용합니다 `-match <filter>` 매개 변수 chown 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

구문

```
xcp chown -match <filter>  -user <user_name> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -exclude "fnm('1.img')" -user user2
101.101.10.210:/s_v1/smaple_set/D1

Excluded: 1 excluded, 0 did not match exclude criteria
Xcp command : xcp chown -exclude fnm('1.img') -user
user2101.101.10.210:/s_v1/smaple_set/D1
Stats : 5 scanned, 1 excluded, 5 changed ownership
Speed : 2.10 KiB in (1.75 KiB/s), 976 out (812/s)
Total Time : 1s.
STATUS : PASSED
[root@user-1 linux]#
```

## Chown - 그룹 **<group>**

를 사용합니다 `-group <group>` 매개 변수 `chown` 명령어로 소스에서 Linux GID를 설정합니다.

구문

```
xcp chown -match <filter> -user <user_name> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -group group1
101.101.10.210:/s_v1/smaple_set/D1

Xcp command : xcp chown -group group1
101.101.10.210:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 2.25 KiB in (1.92 KiB/s), 1.11 KiB out (974/s)
Total Time : 1s.
STATUS : PASSED
[root@user-1 linux]#
```

## chown - 사용자 **<user>**

를 사용합니다 `-user <user>` 매개 변수 `chown` 소스에 Linux UID를 설정하는 명령입니다.

구문

```
xcp chown -user -user <user_name> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -user user1
102.101.10.210:/s_v1/smaple_set/D1

Xcp command : xcp chown -user user1 102.101.10.210:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 2.25 KiB in (3.12 KiB/s), 1.11 KiB out (1.55 KiB/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

**Chown-user - 출처: <user_from>**

를 사용합니다 `-user-from <user_from>` 매개 변수 `chown` UID를 변경하는 명령입니다.

구문

```
 xcp chown -user-from user1 -user <user_name> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -user-from user1 -user user2
101.101.10.210:/s_v1/smaple_set/D1

Xcp command : xcp chown -user-from user1 -user user2
102.108.10.210:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 2.25 KiB in (2.44 KiB/s), 1.11 KiB out (1.21 KiB/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

**Chown-group-from <group_from>(채널 그룹)**

를 사용합니다 `-group-from <group_from>` 매개 변수 `chown` GID를 변경하는 명령입니다.

구문

```
 xcp chown -group-from <group_name> -group <group_name> <source NFS export
 path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -group-from group1 -group group2
101.101.10.210:/s_v1/smaple_set/D1

Xcp command : xcp chown -group-from group1 -group group2
101.101.10.210:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 2.25 KiB in (4.99 KiB/s), 1.11 KiB out (2.47 KiB/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

**Chown - 참조 \<reference\>**

를 사용합니다 `-reference <reference>` 매개 변수 `chown` 참조된 파일 또는 디렉토리 지점을 지정하는 명령입니다.

구문

```
xcp chown -reference <reference> <source NFS export path>
```

예제 보기

```
[root@user-1 linux]# ./xcp chown -reference
101.101.10.210:/s_v1/smaple_set/D2/2.img
101.101.10.210:/s_v1/smaple_set/D1

Xcp command : xcp chown -reference
101.101.10.210:/s_v1/smaple_set/D2/2.img
101.101.10.210:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 3.11 KiB in (6.25 KiB/s), 2.01 KiB out (4.05 KiB/s)
Total Time : 0s.
STATUS : PASSED
[root@user-1 linux]#
```

**채널 - v**

를 사용합니다 `-v` 매개 변수 `chown` 명령을 사용하여 처리된 모든 개체에 대한 출력을 보고합니다.

## 구문

```
xcp chown -user-from <user_name> -v -user <user_name> <source NFS export
path>
```

## 예제 보기

```
[root@user-1 linux]# ./xcp chown -user-from user2 -v -user user1
101.101.10.210:/s_v1/smaple_set/D1

changed ownership of 101.101.10.210:/s_v1/smaple_set/D1 from 1004:1003
to 1001:1003
changed ownership of 101.101.10.210:/s_v1/smaple_set/D1/1.img from
1004:1003 to 1001:1003
changed ownership of 101.101.10.210:/s_v1/smaple_set/D1/1.txt from
1004:1003 to 1001:1003
changed ownership of 101.101.10.210:/s_v1/smaple_set/D1/softlink_1.img
from 1004:1003 to
1001:1003
changed ownership of
101.101.10.210:/s_v1/smaple_set/D1/softlink_to_hardlink_1.img from
1004:1003 to 1001:1003
changed ownership of 101.101.10.210:/s_v1/smaple_set/D1/hardlink_1.img
from 1004:1003 to
1001:1003
Xcp command : xcp chown -user-from user2 -v -user user1
101.101.10.210:/s_v1/smaple_set/D1
Stats : 6 scanned, 6 changed ownership
Speed : 2.25 KiB in (2.02 KiB/s), 1.11 KiB out (1.00 KiB/s)
Total Time : 1s.

STATUS : PASSED
[root@user-1]
```

## 로그 덤프

NFS `logdump` 명령은 마이그레이션 ID 또는 작업 ID를 기준으로 로그를 필터링하고 해당
로그를 에 덤프합니다 `.zip` 현재 디렉토리에 있는 파일입니다. 를 클릭합니다 `.zip` 파일의
이름은 명령에 사용되는 마이그레이션 또는 작업 ID와 같습니다.

구문

```
xcp logdump -m <migration ID>
xcp logdump -j <job ID>
```

예제 보기

```
[root@client1 xcp_nfs]# xcp logdump -j Job_2022-06-
14_21.49.28.060943_scan

xcp: Job ID: Job_2022-06-14_21.52.48.744198_logdump
Xcp command : xcp logdump -j Job_2022-06-14_21.49.28.060943_scan
Stats :
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 0s.
Job ID : Job_2022-06-14_21.52.48.744198_logdump
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2022-06-
14_21.52.48.744198_logdump.log
STATUS : PASSED
[root@client xcp_nfs]# ls Job_2022-06-14_21.49.28.060943_scan
Job_2022-06-14_21.49.28.060943_scan.log supplementary
[root@client1 xcp_nfs]# ls Job_2022-06-
14_21.49.28.060943_scan/supplementary/
Job_idx_2022-06-14_21.46.05.167338_copy.log Job_idx_2022-06-
14_21.47.41.868410_sync.log
xcp_history.json

Job_idx_2022-06-14_21.46.35.134294_sync.log Job_idx_2022-06
14_21.48.00.085869_sync.log
[root@client1 xcp_nfs]#
[root@client1 xcp_nfs]# ./xcp logdump -m idx

xcp: Job ID: Job_2022-06-14_21.56.04.218977_logdump
Xcp command : xcp logdump -m idx
Stats :
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 0s.
Job ID : Job_2022-06-14_21.56.04.218977_logdump
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2022-06-
14_21.56.04.218977_logdump.log
STATUS : PASSED
[root@client1 xcp_nfs]# ls idx
Job_idx_2022-06-14_21.46.05.167338_copy.log Job_idx_2022-06-
14_21.47.41.868410_sync.log
xcp_history.json
Job_idx_2022-06-14_21.46.35.134294_sync.log Job_idx_2022-06-
14_21.48.00.085869_sync.log
```

## 삭제

xCP NFS입니다 `delete` 명령은 지정된 경로의 모든 것을 삭제합니다.

### 구문

```
xcp delete <NFS export path>
```

```
[root@localhost ]# /xcp/linux/xcp delete <IP address of destination
NFSserver>:/dest_vol

WARNING: You have selected <IP address of destination NFS
server>:/dest_vol for
removing data.Data in this path /dest_vol will be deleted.
Are you sure you want to delete (yes/no): yes
Recursively removing data in <IP address of destination NFS
server>:/dest_vol ...
31,996 scanned, 5,786 removes, 3 rmdirs, 8.27 MiB in (1.65 MiB/s), 1.52
MiB out (312
KiB/s), 5s
40,324 scanned, 19,829 removes, 22 rmdirs, 12.2 MiB in (799 KiB/s),
3.89 MiB out
(485 KiB/s),10s
54,281 scanned, 32,194 removes, 2,365 rmdirs, 17.0 MiB in (991 KiB/s),
6.15 MiB out
(463 KiB/s),15s
75,869 scanned, 44,903 removes, 4,420 rmdirs, 23.4 MiB in (1.29 MiB/s),
8.60
MiB out (501KiB/s), 20s
85,400 scanned, 59,728 removes, 5,178 rmdirs, 27.8 MiB in (881 KiB/s),
11.1 MiB out
(511 KiB/s),25s
106,391 scanned, 76,229 removes, 6,298 rmdirs, 34.7 MiB in (1.39
MiB/s), 14.0
MiB out (590KiB/s), 30s
122,107 scanned, 93,203 removes, 7,448 rmdirs, 40.9 MiB in (1.24
MiB/s), 16.9
MiB out (606KiB/s), 35s
134,633 scanned, 109,815 removes, 9,011 rmdirs, 46.5 MiB in (1.12
MiB/s), 20.0
MiB out (622KiB/s), 40s
134,633 scanned, 119,858 removes, 9,051 rmdirs, 47.9 MiB in (288
KiB/s), 21.4
MiB out (296KiB/s), 45s
134,633 scanned, 119,858 removes, 9,051 rmdirs, 47.9 MiB in (0/s), 21.4
MiB out (0/s), 50s
134,633 scanned, 121,524 removes, 9,307 rmdirs, 48.2 MiB in (51.7
KiB/s), 21.7
MiB out (49.5KiB/s), 55s
Xcp command : xcp delete <IP address of destination NFS
server>:/dest_vol134,633 scanned, 0 matched, 134,632 delete
```

```
items, 0 error
Speed : 48.7 MiB in (869 KiB/s), 22.2 MiB out
(396 KiB/s)Total Time : 57s.
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `delete` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<nfs_delete_match,삭제 - 일치(); 필터(); | 필터와 일치하는 파일 및 디렉토리만 처리합니다. |
| 삭제 - 하중 | 확인하지 않고 삭제합니다. |
| delete-removetopdir입니다 | 하위 디렉토리를 포함하여 디렉토리를 제거합니다. |
| <<nfs_delete_exclude,삭제 - 제외(); 필터(); | 필터와 일치하는 파일 및 디렉토리를 제외합니다. |
| <<nfs_delete_parallel,삭제 - 병렬();n | 최대 동시 배치 프로세스를 지정합니다(기본값: 7). |
| delete-preserve-atime을 선택합니다 | 파일 또는 디렉토리의 액세스 시간을 유지합니다(기본값: false). |
| <<nfs_delete_loglevel,삭제 - 로그 수준();이름(); | 로그 레벨을 설정합니다. 사용 가능한 레벨은 Info, debug(기본값: Info)입니다. |
| -s3.insecure 을 삭제합니다 | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| <<nfs_delete_endpoint,삭제 -s3.endpoint | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<nfs_delete_s3_profile,-s3.profile 삭제();PROFILE_NAME | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| -s3.noverify 을 삭제합니다 | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

**삭제 - <filter>를 일치시킵니다**

를 사용합니다 `-match <filter>` 매개 변수 `delete` 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

구문

```
xcp delete -match <filter> <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -match "fnm('XCP_copy_2023-04-
25_05.51.28.315997')" 10.101.10.101:/xcp_catalog

Job ID: Job_2023-04-25_06.10.29.637371_delete
WARNING: You have selected 10.101.10.101:/xcp_catalog for removing
data. Data in this path
/xcp_catalog will be deleted.
Are you sure you want to delete (yes/no): yes
Recursively removing data in 10.101.10.101:/xcp_catalog ...
Xcp command : xcp delete -match fnm('XCP_copy_2023-04-
25_05.51.28.315997')
10.101.10.101:/xcp_catalog
Stats : 209 scanned, 14 matched, 12 removes, 2 rmdirs
Speed : 58.9 KiB in (18.6 KiB/s), 8.25 KiB out (2.60 KiB/s)
Total Time : 3s.
Job ID : Job_2023-04-25_06.10.29.637371_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_06.10.29.637371_delete.log
STATUS : PASSED
```

## 삭제 **-** 하중

를 사용합니다 `-force` 매개 변수 `delete` 확인 없이 삭제하는 명령입니다.

구문

```
xcp delete -force <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -force
10.101.10.101:/xcp_catalog/catalog/indexes/XCP_copy_2023-04-
25_05.53.58.273910

Job ID: Job_2023-04-25_06.11.30.584440_delete
WARNING: You have selected
10.101.10.101:/xcp_catalog/catalog/indexes/XCP_copy_2023-04-
25_05.53.58.273910 for removing data. Data in this path
/xcp_catalog/catalog/indexes/XCP_copy_2023-04-25_05.53.58.273910 will
be deleted.
Recursively removing data in
10.101.10.101:/xcp_catalog/catalog/indexes/XCP_copy_2023-04-
25_05.53.58.273910 ...
Xcp command : xcp delete -force
110.101.10.101:/xcp_catalog/catalog/indexes/XCP_copy_2023-04-
25_05.53.58.273910
Stats : 14 scanned, 12 removes, 1 rmdir
Speed : 6.44 KiB in (4.73 KiB/s), 3.59 KiB out (2.64 KiB/s)
Total Time : 1s.
Job ID : Job_2023-04-25_06.11.30.584440_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_06.11.30.584440_delete.log
STATUS : PASSED
[root@client-1 linux] #
```

**delete-removetopdir**입니다

를 사용합니다 `-removetopdir` 매개 변수 `delete` 하위 디렉토리를 포함하여 디렉토리를 제거하는 명령입니다.

구문

```
xcp delete -force -loglevel <name> -removetopdir <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -force -loglevel DEBUG -removetopdir
10.101.10.101:/temp7/user9

Job ID: Job_2023-04-25_08.03.38.218893_delete
WARNING: You have selected 10.101.10.101:/temp7/user9 for removing
data. Data in this path
/temp7/user9 will be deleted.
Recursively removing data in 10.101.10.101:/temp7/user9 ...
50,500 scanned, 16,838 removes, 11.5 MiB in (2.27 MiB/s), 2.70 MiB out
(547 KiB/s), 5s
85,595 scanned, 43,016 removes, 21.5 MiB in (1.97 MiB/s), 6.70 MiB out
(806 KiB/s), 10s
.
.
.
1.01M scanned, 999,771 removes, 1,925 rmdirs, 324 MiB in (1.42 MiB/s),
153 MiB out (922
KiB/s), 3m6s

Xcp command : xcp delete -force -loglevel DEBUG -removetopdir
10.101.10.101:/temp7/user9
Stats : 1.01M scanned, 1.01M removes, 2,041 rmdirs
Speed : 326 MiB in (1.73 MiB/s), 155 MiB out (842 KiB/s)
Total Time : 3m8s.
Job ID : Job_2023-04-25_08.03.38.218893_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_08.03.38.218893_delete.log
STATUS : PASSED
[root@client1 linux]#
```

삭제 - **<filter>** 제외

를 사용합니다 `-exclude <filter>` 매개 변수 `delete` 필터와 일치하는 파일 및 디렉토리를 제외하는 명령입니다.

구문

```
xcp delete -force -exclude <filter>  <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -force -exclude "fnm('USER5')"
10.101.10.101:/temp7/user2/

Job ID: Job_2023-04-25_07.54.25.241216_delete
WARNING: You have selected 10.101.10.101:/temp7/user2 for removing
data. Data in this path
/temp7/user2 will be deleted.
Recursively removing data in 10.101.10.101:/temp7/user2 ...
29,946 scanned, 1 excluded, 6,492 removes, 977 rmdirs, 7.42 MiB in
(1.48 MiB/s), 1.54 MiB out
(316 KiB/s), 5s
Xcp command : xcp delete -force -exclude fnm('USER5')
10.101.10.101:/temp7/user2/
Stats : 29,946 scanned, 1 excluded, 28,160 removes, 1,785 rmdirs
Speed : 10.6 MiB in (1.18 MiB/s), 5.03 MiB out (574 KiB/s)
Total Time : 8s.
Job ID : Job_2023-04-25_07.54.25.241216_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_07.54.25.241216_delete.log
STATUS : PASSED
[root@client1 linux]#
```

## 삭제 - 병렬 **<n>**

를 사용합니다 `-parallel <n>` 매개 변수 `delete` 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은 7입니다.

## 구문

```
xcp delete -force -parallel <n> -match <filter> <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -force -parallel 8 -match
"fnm('2023-04-25_05.49.26.733160*')" 10.101.10.101:/xcp_catalog/

Job ID: Job_2023-04-25_06.15.27.024987_delete
WARNING: You have selected 10.101.10.101:/xcp_catalog for removing
data. Data in this path /xcp_catalog will be deleted.
Recursively removing data in 10.101.10.101:/xcp_catalog ...
Xcp command : xcp delete -force -parallel 8 -match fnm('2023-04-
25_05.49.26.733160*')
10.101.10.101:/xcp_catalog/
Stats : 182 scanned, 1 matched, 1 remove
Speed : 50.0 KiB in (115 KiB/s), 5.45 KiB out (12.5 KiB/s)
Total Time : 0s.
Job ID : Job_2023-04-25_06.15.27.024987_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_06.15.27.024987_delete.log
STATUS : PASSED
[root@client1 linux]#
```

**delete-preserve-atime**을 선택합니다

를 사용합니다 `-preserve-atime <preserve-atime>` 매개 변수 `delete` 파일 또는 디렉토리의 액세스 시간을
보존하는 명령입니다. 기본값은 false 입니다.

구문

```
xcp delete -force -preserve-atime <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -force -preserve-atime
<IP_address>:/temp7/user2/

Job ID: Job_2023-04-25_07.55.30.972162_delete
WARNING: You have selected <IP_address>:/temp7/user2 for removing data.
Data in this path
/temp7/user2 will be deleted.
Recursively removing data in <IP_address>:/temp7/user2 ...
Xcp command : xcp delete -force -preserve-atime
<IP_address>:/temp7/user2/
Stats : 256 scanned, 255 rmdirs
Speed : 199 KiB in (108 KiB/s), 75.7 KiB out (41.1 KiB/s)
Total Time : 1s.
Job ID : Job_2023-04-25_07.55.30.972162_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_07.55.30.972162_delete.log
STATUS : PASSED
[root@client-1 linux]#
```

## 삭제 **-** 로그 수준 **<name>**

를 사용합니다 `-loglevel <name>` 매개 변수 `delete` 로그 레벨을 설정하는 명령입니다. 사용 가능한 레벨은 Info 및 debug입니다. 기본 레벨은 Info입니다.

구문

```
xcp delete -force -loglevel DEBUG -removetopdir <NFS export path>
```

예제 보기

```
[root@client1 linux]# ./xcp delete -force -loglevel DEBUG -removetopdir
10.101.10.101:/temp7/user9

Job ID: Job_2023-04-25_08.03.38.218893_delete
WARNING: You have selected 10.101.10.101:/temp7/user9 for removing
data. Data in this
path /temp7/user9 will be deleted.
Recursively removing data in 10.101.10.101:/temp7/user9 ...
50,500 scanned, 16,838 removes, 11.5 MiB in (2.27 MiB/s), 2.70 MiB out
(547 KiB/s), 5s
85,595 scanned, 43,016 removes, 21.5 MiB in (1.97 MiB/s), 6.70 MiB out
(806 KiB/s),
10s
.
.
.
1.01M scanned, 999,771 removes, 1,925 rmdirs, 324 MiB in (1.42 MiB/s),
153 MiB out
(922 KiB/s), 3m6s
Xcp command : xcp delete -force -loglevel DEBUG -removetopdir
10.101.10.101:/temp7/user9
Stats : 1.01M scanned, 1.01M removes, 2,041 rmdirs
Speed : 326 MiB in (1.73 MiB/s), 155 MiB out (842 KiB/s)
Total Time : 3m8s.
Job ID : Job_2023-04-25_08.03.38.218893_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
25_08.03.38.218893_delete.log
STATUS : PASSED
[root@client-1 linux]#
```

**-s3.insecure** 을 삭제합니다

를 사용합니다 `-s3.insecure` 매개 변수 `delete` S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 명령

구문

```
xcp delete -s3.insecure s3://bucket1
```

예제 보기

```
[root@client1 linux]# ./xcp delete -s3.insecure s3:// bucket1

Job ID: Job_2023-06-08_08.51.40.849991_delete
WARNING: You have selected s3://bucket1 for removing data. Data in this
path //bucket1 will be
deleted.
Are you sure you want to delete (yes/no): yes
Recursively removing data in s3://bucket1 ...
Xcp command : xcp delete -s3.insecure s3://bucket1
Stats : 8 scanned, 6 s3.objects, 6 s3.removed
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 5s.
Job ID : Job_2023-06-08_08.51.40.849991_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_08.51.40.849991_delete.log
STATUS : PASSED
```

**delete -s3.endpoint <s3_endpoint_url>**

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수 `delete` S3 버킷 통신을 위해 지정된 URL로
기본 AWS 끝점 URL을 재정의하는 명령입니다.

구문

```
xcp delete -s3.endpoint https://<endpoint_url>: s3://bucket
```

예제 보기

```
[root@client1 linux]# ./xcp delete -s3.endpoint https://<endpoint_url>:
s3://xcp-testing

Job ID: Job_2023-06-13_11.39.33.042545_delete
WARNING: You have selected s3://xcp-testing for removing data. Data in
this path //xcp-testing
will be deleted.
Are you sure you want to delete (yes/no): yes
Recursively removing data in s3://xcp-testing ...
Xcp command : xcp delete -s3.endpoint https://<endpoint_url>: s3://xcp-
testing
Stats : 8 scanned, 5 s3.objects, 5 s3.removed
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 4s.
Job ID : Job_2023-06-13_11.39.33.042545_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_11.39.33.042545_delete.log
STATUS : PASSED
```

**-s3.profile <name>를 삭제합니다**

를 사용합니다 s3.profile 매개 변수 delete S3 버킷 통신에 사용할 AWS 자격 증명 파일에서 프로필을 지정하는 명령

구문

```
xcp delete -s3.profile sg -s3.endpoint https://<endpoint_url>:
s3://bucket
```

예제 보기

```
[root@client1 linux]# ./xcp delete -s3.profile sg -s3.endpoint
https://<endpoint_url>: s3://bucket

Job ID: Job_2023-06-08_08.53.19.059745_delete
WARNING: You have selected s3://bucket for removing data. Data in this
path //bucket will be deleted.
Are you sure you want to delete (yes/no): yes
Recursively removing data in s3://bucket ...
1 scanned, 0 in (0/s), 0 out (0/s), 5s
Xcp command : xcp delete -s3.profile sg -s3.endpoint
https://<endpoint_url>: s3:/ bucket
Stats : 7 scanned, 5 s3.objects, 5 s3.removed
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 9s.
Job ID : Job_2023-06-08_08.53.19.059745_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
08_08.53.19.059745_delete.log
STATUS : PASSED
```

**-s3.noverify 을 삭제합니다**

를 사용합니다 `-s3.noverify` 매개 변수 `delete` S3 버킷 통신에 대한 SSL 인증의 기본 검증을 재정의하는 명령입니다.

구문

```
xcp delete -s3.noverify s3://bucket
```

```
[root@client-1 linux]# ./xcp delete -s3.noverify s3://bucket1

Job ID: Job_2023-06-13_10.56.19.319076_delete
WARNING: You have selected s3://bucket1 for removing data. Data in this
path //bucket1 will be
deleted.
Are you sure you want to delete (yes/no): yes
Recursively removing data in s3://bucket1 ...
2,771 scanned, 0 in (0/s), 0 out (0/s), 5s
9,009 scanned, 9,005 s3.objects, 2,000 s3.removed, 0 in (0/s), 0 out
(0/s), 10s
Xcp command : xcp delete -s3.noverify s3://bucket1
Stats : 9,009 scanned, 9,005 s3.objects, 9,005 s3.removed
Speed : 0 in (0/s), 0 out (0/s)
Total Time : 15s.
Job ID : Job_2023-06-13_10.56.19.319076_delete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-06-
13_10.56.19.319076_delete.log
STATUS : PASSED
```

## 견적

xCP NFS입니다 `estimate` 명령을 사용하여 소스에서 타겟으로 기본 복제를 완료하는 데 필요한 시간을 추정합니다. CPU, RAM, 네트워크 및 기타 매개 변수와 같이 현재 사용 가능한 시스템 리소스를 모두 사용하여 기준 복사를 완료하는 데 필요한 예상 시간을 계산합니다. 를 사용할 수 있습니다 `-target` 샘플 복사 작업을 시작하고 예상 시간을 가져오는 옵션입니다.

## 구문

```
xcp estimate -id <name>
```

예제 보기

```
[root@client-01 linux]# ./xcp estimate -t 100 -id estimate01 -target
10.101.10.10:/temp8

xcp: WARNING: your license will expire in less than 10 days! You can
renew your license at https://xcp.netapp.com
Job ID: Job_2023-04-12_08.09.16.126908_estimate
Starting live test for 1m40s to estimate time to copy
'10.101.10.10:/temp4' to
'10.101.10.10:/temp8'...
estimate regular file copy task completed before the 1m40s duration
0 in (0/s), 0 out (0/s), 5s
0 in (0/s), 0 out (0/s), 10s
Estimated time to copy '10.101.12.11:/temp4' to '10.101.12.10:/temp8'
based on a 1m40s live test:
5.3s
Xcp command : xcp estimate -t 100 -id estimate01 -target
10.101.12.10:/temp8
Estimated Time : 5.3s
Job ID : Job_2023-04-12_08.09.16.126908_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
12_08.09.16.126908_estimate.log
STATUS : PASSED
[root@client-01linux]#
```

다음 표에는 가 나열되어 있습니다 `estimate` 매개 변수 및 설명

| 매개 변수 | 설명 |
| --- | --- |
| <<nfs_estimate_id,견적-id | 이전 복사본 또는 스캔 인덱스의 카탈로그 이름을 지정합니다. |
| <<nfs_estimate_gbit,추정 - 비트(); n | 기가비트의 대역폭을 사용하여 최적의 시간을 예측합니다 (기본값: 1). |
| <<nfs_estimate_target,견적 - 타겟();경로 | 라이브 테스트 복사에 사용할 대상을 지정합니다. |
| <<nfs_estimate_t,견적 - t n/s/m/h] | 라이브 테스트 복사 기간을 지정합니다(기본값: 5m). |
| <<nfs_estimate_bs,추정 - BS n[k] | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<nfs_estimate_dircount,예상 - dircount n[k] | 디렉토리를 읽기 위한 요청 크기를 지정합니다(기본값: 64k). |
| 추정-보존-atime | 파일 또는 디렉토리의 액세스 시간을 유지합니다(기본값: False). |
| <<nfs_estimate_loglevel,견적 - 로그 수준 | 로그 레벨을 설정합니다. 사용 가능한 레벨은 Info, debug(기본값: Info)입니다. |

**Estimate-id <name>입니다**

를 사용합니다 `-id <name>` 매개 변수 `estimate` 필터와 일치하는 파일 및 디렉토리를 제외하는 명령입니다.

구문

```
xcp estimate -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp estimate -id csdata01

xcp: WARNING: your license will expire in less than 11 days! You can
renew your license at
https://xcp.netapp.com
xcp: WARNING: XCP catalog volume is low on disk space: 99.99% used,
62.0 MiB free space.
Job ID: Job_2023-04-20_12.59.31.260914_estimate
== Best-case estimate to copy 'data-set:/user1given 1 gigabit of
bandwidth ==
112 TiB of data at max 128 MiB/s: at least 10d13h
Xcp command : xcp estimate -id csdata01
Estimated Time : 10d13h
Job ID : Job_2023-04-20_12.59.31.260914_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
20_12.59.31.260914_estimate.log
STATUS : PASSED
xcp: WARNING: XCP catalog volume is low on disk space: 99.99% used,
62.0 MiB free space.
[root@client1 linux]#
```

**예상 - Gbit <n>**

를 사용합니다 `-gbit <n>` 매개 변수 `estimate` 명령을 사용하여 최적의 시간을 예측합니다(기본값: 1). 이 옵션은 과 함께 사용할 수 없습니다 `-target` 옵션을 선택합니다.

구문

```
xcp estimate -gbit <n> -id <name>
```

예제 보기

```
[root@client-01 linux]# ./xcp estimate -gbit 10 -id estimate01

xcp: WARNING: your license will expire in less than 10 days! You can
renew your license at
https://xcp.netapp.com
Job ID: Job_2023-04-12_08.12.28.453735_estimate
== Best-case estimate to copy '10.101.12.11:/temp4' given 10 gigabits
of bandwidth ==
0 of data at max 1.25 GiB/s: at least 0.0s
Xcp command : xcp estimate -gbit 10 -id estimate01
Estimated Time : 0.0s
Job ID : Job_2023-04-12_08.12.28.453735_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
12_08.12.28.453735_estimate.log
STATUS : PASSED
[root@client-01linux]#
```

## 예상 - 대상 **<path>**

를 사용합니다 `-target <path>` 매개 변수 `estimate` 라이브 테스트 복사본에 사용할 타겟을 지정하는 명령입니다.

구문

```
xcp estimate -t 100 -id <name> -target <path>
```

예제 보기

```
[root@client-01 linux]# ./xcp estimate -t 100 -id estimate01 -target
10.101.12.11:/temp8

xcp: WARNING: your license will expire in less than 10 days! You can
renew your license at https://xcp.netapp.com
Job ID: Job_2023-04-12_08.09.16.126908_estimate
Starting live test for 1m40s to estimate time to copy
'10.101.12.11:/temp4' to '10.101.12.11:/temp8'...
estimate regular file copy task completed before the 1m40s duration
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
12_08.09.16.126908_estimate.log
STATUS : PASSED
[root@client-01linux]#
```

## 추정 - t <n[s|m|h]>

를 사용합니다 `-t <n[s|m|h]>` 매개 변수 `estimate` 라이브 테스트 복사 기간을 지정하는 명령입니다. 기본값은 5m입니다.

구문

```
xcp estimate -t <n[s|m|h]> -id <name> -target <path>
```

예제 보기

```
[root@client-01 linux]# ./xcp estimate -t 100 -id estimate01 -target
10.101.12.12:/temp8

xcp: WARNING: your license will expire in less than 10 days! You can
renew your license at
https://xcp.netapp.com
Job ID: Job_2023-04-12_08.09.16.126908_estimate
Starting live test for 1m40s to estimate time to copy
'10.101.12.11:/temp4' to
'10.101.12.12:/temp8'...
estimate regular file copy task completed before the 1m40s duration
0 in (0/s), 0 out (0/s), 5s
0 in (0/s), 0 out (0/s), 10s
Estimated time to copy '10.101.12.11:/temp4' to '10.101.12.12:/temp8'
based on a 1m40s live
test: 5.3s

Xcp command : xcp estimate -t 100 -id estimate01 -target
10.101.12.11:/temp8
Estimated Time : 5.3s
Job ID : Job_2023-04-12_08.09.16.126908_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
12_08.09.16.126908_estimate.log
STATUS : PASSED
[root@client-01linux]#
```

## 추정 - BS <n[k]>

를 사용합니다 `-bs <n[k]>` 매개 변수 `estimate` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp estimate -id <name> -bs <n[k]>
```

예제 보기

```
[root@client1 linux]# ./xcp estimate -id estimate01 -bs 128k

xcp: WARNING: your license will expire in less than 7 days! You can
renew your license at
https://xcp.netapp.com
Job ID: Job_2023-04-24_08.44.12.564441_estimate
63.2 KiB in (12.5 KiB/s), 2.38 KiB out (484/s), 5s
== Best-case estimate to copy 'xxx' given 1 gigabit of bandwidth ==
112 TiB of data at max 128 MiB/s: at least 10d13h
Xcp command : xcp estimate -id estimate01 -bs 128k
Estimated Time : 10d13h
Job ID : Job_2023-04-24_08.44.12.564441_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
24_08.44.12.564441_estimate.log
STATUS : PASSED
[root@client1 linux]#
```

**예상 - dircount <n[k]>**

를 사용합니다 `-dircount <n[k]>` 매개 변수 estimate 명령을 사용하여 디렉토리를 읽기 위해 요청된 크기를
지정합니다. 기본값은 64k입니다.

구문

```
xcp estimate -id <name> -dircount <n[k]> -t <n> -target <path>
```

## 예제 보기

```
[root@client1 linux]# ./xcp estimate -id csdata01 -dircount 128k -t 300
-target <path>

xcp: WARNING: your license will expire in less than 11 days! You can
renew your license at
https://xcp.netapp.com
xcp: WARNING: XCP catalog volume is low on disk space: 99.99% used,
61.6 MiB free space.
Job ID: Job_2023-04-20_13.03.46.820673_estimate
Starting live test for 5m0s to estimate time to copy 'data-set:/user1
to `<path>`...
1,909 scanned, 126 copied, 2 giants, 580 MiB in (115 MiB/s), 451 MiB
out (89.5 MiB/s), 5s
1,909 scanned, 134 copied, 2 giants, 1.23 GiB in (136 MiB/s), 1015 MiB
out (112 MiB/s), 10s
1,909 scanned, 143 copied, 2 giants, 1.88 GiB in (131 MiB/s), 1.54 GiB
out (113 MiB/s), 15s
.
.
.
7,136 scanned, 2,140 copied, 4 linked, 8 giants, 33.6 GiB in (110
MiB/s), 32.4 GiB out (110
MiB/s), 4m57s
Sample test copy completed for, 300.03s
0 in (-7215675436.180/s), 0 out (-6951487617.036/s), 5m2s
2,186 scanned, 610 KiB in (121 KiB/s), 76.9 KiB out (15.3 KiB/s), 5m7s
Estimated time to copy 'data-set:/user1to '10.01.12.11:/mapr11' based
on a 5m0s live test:
7d6h
Xcp command : xcp estimate -id csdata01 -dircount 128k -t 300 -target
10.101.12.11:/mapr11
Estimated Time : 7d6h
Job ID : Job_2023-04-20_13.03.46.820673_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
20_13.03.46.820673_estimate.log
STATUS : PASSED
xcp: WARNING: XCP catalog volume is low on disk space: 99.99% used,
61.6 MiB free space.
[root@client1 linux]#
```

**Estimate - 병렬 <n>**

를 사용합니다 `-parallel <n>` 매개 변수 `estimate` 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은 7입니다.

구문

```
xcp estimate -loglevel <name> -parallel <n> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp estimate -loglevel DEBUG -parallel 8 -id
estimate1

xcp: WARNING: your license will expire in less than 11 days! You can
renew your license at
https://xcp.netapp.com
Job ID: Job_2023-04-20_11.36.45.535209_estimate
== Best-case estimate to copy '10.10.101.10:/users009/xxx/mnt' given 1
gigabit of bandwidth ==
6.75 GiB of data at max 128 MiB/s: at least 54.0s
Xcp command : xcp estimate -loglevel DEBUG -parallel 8 -id estimate1
Estimated Time : 54.0s
Job ID : Job_2023-04-20_11.36.45.535209_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
20_11.36.45.535209_estimate.log
STATUS : PASSED
[root@client1 linux]#
```

**추정-보존-atime**

를 사용합니다 `-preserve-atime` 매개 변수 `estimate` 파일 또는 디렉토리의 액세스 시간을 보존하는 명령입니다. 기본값은 false 입니다.

구문

```
xcp estimate -loglevel <name> -preserve-atime -id <name>
```

예제 보기

```
root@client1 linux]# ./xcp estimate -loglevel DEBUG -preserve-atime -id
estimate1

xcp: WARNING: your license will expire in less than 11 days! You can
renew your license at
https://xcp.netapp.com
Job ID: Job_2023-04-20_11.19.04.050516_estimate
== Best-case estimate to copy '10.10.101.10:/users009/xxx/mnt' given 1
gigabit of bandwidth
==
6.75 GiB of data at max 128 MiB/s: at least 54.0s
Xcp command : xcp estimate -loglevel DEBUG -preserve-atime -id
estimate1
Estimated Time : 54.0s
Job ID : Job_2023-04-20_11.19.04.050516_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
20_11.19.04.050516_estimate.log
STATUS : PASSED
[root@client1 linux]#
```

**견적 - 로그 수준 \<name\>**

를 사용합니다 `-loglevel <name>` 매개 변수 `estimate` 로그 레벨을 설정하는 명령입니다. 사용 가능한 레벨은
Info 및 debug입니다. 기본 레벨은 Info입니다.

구문

```
xcp estimate -loglevel <name> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp estimate -loglevel DEBUG -parallel 8 -id
estimate1

xcp: WARNING: your license will expire in less than 11 days! You can
renew your license at
https://xcp.netapp.com
Job ID: Job_2023-04-20_11.36.45.535209_estimate
== Best-case estimate to copy '10.10.101.10:/users009/xxx/mnt' given 1
gigabit of bandwidth ==
6.75 GiB of data at max 128 MiB/s: at least 54.0s
Xcp command : xcp estimate -loglevel DEBUG -parallel 8 -id estimate1
Estimated Time : 54.0s
Job ID : Job_2023-04-20_11.36.45.535209_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-04-
20_11.36.45.535209_estimate.log
STATUS : PASSED
[root@client1 linux]#
```

## 인덱스 삭제

NFS `indexdelete` 명령이 카탈로그 인덱스를 삭제합니다.

구문

```
xcp indexdelete
```

예제 보기

```
[root@client1 linux]# ./xcp indexdelete

Job ID: Job_2023-11-16_02.41.20.260166_indexdelete
========================================================================
====================
Name Command Size Created Updated
========================================================================
====================
isync_tc1_retry copy 996 KiB 15-Nov-2023 15-Nov-2023
isync_est_isync isync 1012 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_05.56.17.522428 verify 1016 KiB 15-Nov-2023 15-
Nov-2023
XCP_verify_2023-11-15_06.04.31.693517 verify 1.00 MiB 15-Nov-2023 15-
Nov-2023
isync_tc1_retry1 copy 988 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_09.02.46.973624 verify 988 KiB 15-Nov-2023 15-
Nov-2023
est001 isync 1012 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_09.37.24.179634 verify 0 15-Nov-2023 15-Nov-2023
a1batch_error1 copy 368 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_09.45.53.104055 verify 360 KiB 15-Nov-2023 15-
Nov-2023
a1batch_error2 isync 376 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_09.48.05.000473 verify 372 KiB 15-Nov-2023 15-
Nov-2023
b1batch_error1 copy 4.50 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_12.00.29.214479 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
b1batch_error2 isync 4.50 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_12.00.40.536687 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
XCP_verify_2023-11-15_12.27.08.055501 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
XCP_verify_2023-11-15_12.27.39.797020 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
XCP_verify_2023-11-15_12.52.29.408766 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
XCP_verify_2023-11-15_12.53.01.870109 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
c1batch_error1 copy 988 KiB 15-Nov-2023 15-Nov-2023
XCP_verify_2023-11-15_22.54.11.081944 verify 976 KiB 15-Nov-2023 15-
Nov-2023
c1batch_error2 isync 1020 KiB 15-Nov-2023 15-Nov-2023
```

```
XCP_verify_2023-11-15_23.19.44.158263 verify 1.00 MiB 15-Nov-2023 15-
Nov-2023
XCP_verify_2023-11-15_23.44.01.274732 verify 4.50 KiB 15-Nov-2023 15-
Nov-2023
c1batch_error132576 copy 992 KiB 16-Nov-2023 16-Nov-2023
c1batch_error227998 isync 1004 KiB 16-Nov-2023 16-Nov-2023
XCP_verify_2023-11-16_01.07.45.824516 verify 1012 KiB 16-Nov-2023 16-
Nov-2023
S3_index copy 52.5 KiB 16-Nov-2023 16-Nov-2023
S3_index1 copy 52.5 KiB 16-Nov-2023 16-Nov-2023
c1batch_error14383 copy 728 KiB 16-Nov-2023 16-Nov-2023
32 scanned, 941 KiB in (1.04 MiB/s), 48.8 KiB out (55.4 KiB/s), 0s.
WARNING: 31 indexes will be deleted permanently.
Are you sure you want to delete (yes/no): yes
Xcp command : xcp indexdelete
Stats : 466 scanned, 31 index deleted
Speed : 1.09 MiB in (216 KiB/s), 133 KiB out (25.8 KiB/s)
Total Time : 5s.
Job ID : Job_2023-11-16_02.41.20.260166_indexdelete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.41.20.260166_indexdelete.log
STATUS : PASSED
[root@client1 linux]#
```

다음 표에는 가 나열되어 있습니다 `indexdelete` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| <<nfs_indexdelete_match,indexdelete - 일치(); 필터(); | 필터와 일치하는 파일 및 디렉토리만 처리합니다. |
| <<nfs_indexdelete_loglevel,indexdelete - LogLevel 이름 GT; | 로그 레벨을 설정합니다. 사용 가능한 레벨은 Info, debug(기본값: Info)입니다. |

**indexdelete - <filter>와 일치합니다**

를 사용합니다 `-match <filter>` 매개 변수 `indexdelete` 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

구문

```
xcp indexdelete -match <filter>
```

예제 보기

```
[root@client1 linux]# ./xcp indexdelete -match "fnm('S3_index12')"

Job ID: Job_2023-11-16_02.44.39.862423_indexdelete
=========================================================================
==
Name Command Size Created Updated
=========================================================================
==
S3_index12 copy 52.5 KiB 16-Nov-2023 16-Nov-2023
5 scanned, 1 matched, 141 KiB in (121 KiB/s), 6.05 KiB out (5.20
KiB/s), 1s.
WARNING: 1 matched index will be deleted permanently.
Are you sure you want to delete (yes/no): yes
Xcp command : xcp indexdelete -match fnm('S3_index12')
Stats : 19 scanned, 1 matched, 1 index deleted
Speed : 146 KiB in (29.3 KiB/s), 8.59 KiB out (1.72 KiB/s)
Total Time : 4s.
Job ID : Job_2023-11-16_02.44.39.862423_indexdelete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.44.39.862423_indexdelete.log
STATUS : PASSED
[root@client1 linux]#
```

**indexdelete - LogLevel <name>입니다**

를 사용합니다 `-loglevel <name>` 매개 변수 `indexdelete` 로그 레벨을 설정하는 명령입니다. 사용 가능한 레벨은 Info 및 debug입니다. 기본 레벨은 Info입니다.

구문

```
xcp indexdelete -loglevel <name> -match <filter>
```

```
root@client1 linux]# ./xcp indexdelete -loglevel DEBUG -match
"fnm('test*')"

Job ID: Job_2023-11-16_03.39.36.814557_indexdelete
========================================================================
====================
Name Command Size Created Updated
========================================================================
====================
testing scan 24.5 KiB 16-Nov-2023 16-Nov-2023
testingisync isync 12.5 KiB 16-Nov-2023 16-Nov-2023
5 scanned, 2 matched, 65.1 KiB in (61.1 KiB/s), 6.24 KiB out (5.85
KiB/s), 1s.
WARNING: 2 matched indexes will be deleted permanently.
Are you sure you want to delete (yes/no): yes
6 scanned, 2 matched, 65.1 KiB in (10.5 KiB/s), 6.39 KiB out (1.03
KiB/s), 7s
Xcp command : xcp indexdelete -loglevel DEBUG -match fnm('test*')
Stats : 32 scanned, 2 matched, 2 index deleted
Speed : 75.5 KiB in (10.3 KiB/s), 11.1 KiB out (1.52 KiB/s)
Total Time : 7s.
Job ID : Job_2023-11-16_03.39.36.814557_indexdelete
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_03.39.36.814557_indexdelete.log
STATUS : PASSED
[root@client1 linux]#
```

## iSync 를 선택합니다

XCP에 대한 설명, 매개 변수 및 예를 봅니다 `isync` 명령을 실행합니다 `isync` 명령은 와 함께
사용됩니다 `estimate` 옵션을 선택합니다.

**iSync 를 선택합니다**

xCP NFS입니다 `isync` 명령은 소스와 대상을 비교하고 카탈로그 인덱스를 사용하지 않고 타겟의 차이점을
동기화합니다.

구문

```
xcp isync <source_ip_address>:/src <destination_ip_address>:/dest
```

## 예제 보기

```
[root@client1 linux]# ./xcp isync <source_ip_address>:/src
<destination_ip_address>:/dest

Job ID: Job_2023-11-20_04.11.03.128824_isync
41,030 scanned, 935 MiB in (162 MiB/s), 4.23 MiB out (752 KiB/s), 6s
57,915 scanned, 2.10 GiB in (239 MiB/s), 10.00 MiB out (1.13 MiB/s),
11s
57,915 scanned, 3.20 GiB in (210 MiB/s), 14.6 MiB out (879 KiB/s), 16s
92,042 scanned, 4.35 GiB in (196 MiB/s), 21.6 MiB out (1.17 MiB/s), 22s
123,977 scanned, 5.70 GiB in (257 MiB/s), 29.6 MiB out (1.49 MiB/s),
27s
137,341 scanned, 6.75 GiB in (212 MiB/s), 36.0 MiB out (1.25 MiB/s),
32s
154,503 scanned, 8.00 GiB in (226 MiB/s), 43.0 MiB out (1.24 MiB/s),
38s
181,578 scanned, 36 copied, 8.68 GiB in (132 MiB/s), 49.7 MiB out (1.26
MiB/s), 43s
target scan completed: 181,656 scanned, 1,477 copied, 1 removed, 8.76
GiB in (200 MiB/s), 123 MiB
out (2.75 MiB/s), 44s.
181,907 scanned, 10,013 copied, 1 removed, 9.17 GiB in (95.3 MiB/s),
545 MiB out (95.2 MiB/s), 49s
Xcp command : xcp isync <source_ip_address>:/src
<destination_ip_address>:/dest
Stats : 1 removed, 181,907 scanned, 10,263 copied
Speed : 9.17 GiB in (190 MiB/s), 548 MiB out (11.1 MiB/s)
Total Time : 49s.
Job ID : Job_2023-11-20_04.11.03.128824_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
20_04.11.03.128824_isync.log
STATUS : PASSED
[root@client1 linux]
```

다음 표에는 가 나열되어 있습니다 `isync` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| iSync - NOData를 선택합니다 | 데이터를 확인하지 않습니다. |
| iSync-noattrs 를 참조하십시오 | 특성을 검사하지 않습니다. |
| iSync - nomods 를 참조하십시오 | 파일 수정 시간을 확인하지 않습니다. |
| <<nfs_isync_mtimewindow,iSync - mtimewindow();s | 확인을 위해 허용되는 수정 시간 차이를 지정합니다. |

| 매개 변수 | 설명 |
|---|---|
| <<nfs_isync_match,iSync - 일치(); 필터(); | 필터와 일치하는 파일 및 디렉토리만 처리합니다. |
| iSync - BS 및 Lt; n[k] 및 GT; | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<nfs_isync_parallel,iSync - 병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |
| <<nfs_isync_dircount,iSync - dircount n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다(기본값 64k). |
| <<nfs_isync_exclude,iSync - 제외(); 필터(); | 필터와 일치하는 파일 및 디렉토리를 제외합니다. |
| <<nfs_isync_newid,iSync-newid | 새 인덱스 카탈로그의 카탈로그 이름을 지정합니다. |
| <<nfs_isync_loglevel,iSync - 로그 수준();이름 및 GT; | 로그 레벨을 설정합니다. 사용 가능한 레벨은 Info, debug(기본값: Info)입니다. |
| iSync-preserve-atime 을 참조하십시오 | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |
| iSync -s3.insecure 참조하십시오 | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| <<nfs_isync_endpoint,iSync-S3.endpoint | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<nfs_isync_s3_profile,iSync -s3.profile 및 lt;profile_name | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| iSync -s3.noverify 참조하십시오 | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

**iSync - NOData**를 선택합니다

를 사용합니다 `-nodata` 매개 변수 `isync` 데이터를 검사하지 않도록 지정하는 명령입니다.

구문

```
xcp isync -nodata <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

## 예제 보기

```
root@client1 linux]# ./xcp isync -nodata
<source_ip_address>:/source_vol<destination_ip_address>:/dest_vol

Job ID: Job_2023-11-16_22.47.20.930900_isync
11,301 scanned, 3.26 MiB in (414 KiB/s), 479 KiB out (59.5 KiB/s), 8s
28,644 scanned, 437 copied, 33.7 MiB in (5.39 MiB/s), 27.2 MiB out
(4.75 MiB/s), 13s
29,086 scanned, 1,001 copied, 58.2 MiB in (3.54 MiB/s), 51.8 MiB out
(3.55 MiB/s), 20s
29,490 scanned, 1,001 copied, 597 removed, 61.1 MiB in (592 KiB/s),
53.7 MiB out (375 KiB/s),
25s
98
.
.
.
43,391 scanned, 1,063 copied, 1,001 removed, 2.49 GiB in (115 MiB/s),
2.48 GiB out (115 MiB/s),
1m17s
43,391 scanned, 1,082 copied, 1,001 removed, 3.08 GiB in (119 MiB/s),
3.07 GiB out (119 MiB/s),
1m23s
43,391 scanned, 1,088 copied, 1,001 removed, 3.68 GiB in (122 MiB/s),
3.67 GiB out (122 MiB/s),
1m28s
Xcp command : xcp isync -nodata <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 1,001 removed, 43,391 scanned, 1,108 copied
Speed : 4.19 GiB in (46.7 MiB/s), 4.18 GiB out (46.5 MiB/s)
Total Time : 1m31s.
Job ID : Job_2023-11-16_22.47.20.930900_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_22.47.20.930900_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_22.47.20.930900_isync.error
STATUS : PASSED
```

**iSync-noattrs** 를 참조하십시오

를 사용합니다 `-noattrs` 매개 변수 `isync` 속성을 검사하지 않도록 지정하는 명령입니다.

## 구문

```
xcp isync -noattrs <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

## 예제 보기

```
[root@client1 linux]# ./xcp isync -noattrs
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

Job ID: Job_2023-11-16_22.49.22.056646_isync
18,036 scanned, 940 MiB in (168 MiB/s), 2.67 MiB out (488 KiB/s), 5s
30,617 scanned, 285 removed, 4.23 GiB in (666 MiB/s), 12.0 MiB out
(1.82 MiB/s), 10s
32,975 scanned, 746 removed, 6.71 GiB in (505 MiB/s), 18.3 MiB out
(1.25 MiB/s), 15s
34,354 scanned, 1,000 removed, 9.39 GiB in (543 MiB/s), 24.9 MiB out
(1.32 MiB/s), 20s
34,594 scanned, 1,000 removed, 12.1 GiB in (540 MiB/s), 31.2 MiB out
(1.24 MiB/s), 26s
36,142 scanned, 722 copied, 1,000 removed, 14.9 GiB in (540 MiB/s),
73.7 MiB out (7.93 MiB/s),
31s
.
.
.
42,496 scanned, 1,000 copied, 1,000 removed, 234 GiB in (716 MiB/s),
582 MiB out (1.55 MiB/s),
7m22s
Xcp command : xcp isync -noattrs <<source_ip_address>>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 1,000 removed, 42,496 scanned, 1,000 copied
Speed : 234 GiB in (542 MiB/s), 583 MiB out (1.32 MiB/s)
Total Time : 7m22s.
Job ID : Job_2023-11-16_22.49.22.056646_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_22.49.22.056646_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_22.49.22.056646_isync.error
STATUS : PASSED
```

**iSync - nomods** 를 참조하십시오

를 사용합니다 `-nomods` 매개 변수 `isync` 파일 수정 시간을 확인하지 않도록 지정하는 명령입니다.

## 구문

```
isync -nomods <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

## 예제 보기

```
[root@client1 linux]# ./xcp isync -nomodes
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

Job ID: Job_2023-11-16_22.56.48.571392_isync
13,897 scanned, 763 MiB in (152 MiB/s), 2.28 MiB out (463 KiB/s), 5s
21,393 scanned, 148 removed, 4.81 GiB in (739 MiB/s), 12.5 MiB out
(1.81 MiB/s), 11s
28,517 scanned, 148 removed, 7.68 GiB in (578 MiB/s), 19.1 MiB out
(1.31 MiB/s), 16s
28,517 scanned, 148 removed, 10.7 GiB in (619 MiB/s), 26.3 MiB out
(1.43 MiB/s), 21s
29,167 scanned, 396 copied, 148 removed, 13.2 GiB in (434 MiB/s), 51.4
MiB out (4.33 MiB/s), 27s
.
.
.
42,790 scanned, 1,000 copied, 1,000 removed, 229 GiB in (641 MiB/s),
571 MiB out (1.40 MiB/s),
6m42s
42,790 scanned, 1,000 copied, 1,000 removed, 232 GiB in (668 MiB/s),
578 MiB out (1.46 MiB/s),
6m47s
Xcp command : xcp isync -nomods <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 1,000 removed, 42,790 scanned, 1,000 copied
Speed : 234 GiB in (585 MiB/s), 583 MiB out (1.42 MiB/s)
Total Time : 6m50s.
Job ID : Job_2023-11-16_22.56.48.571392_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_22.56.48.571392_isync.log
STATUS : PASSED
```

**iSync - mtimewindow <s>** 를 참조하십시오

를 사용합니다 `-mtimewindow <s>` 매개 변수 `isync` 확인을 위해 허용되는 수정 시간 차이를 지정하는 명령입니다.

구문

```
xcp isync -mtimewindow <s> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

**예제 보기**

```
[root@client1 linux]# ./xcp isync -mtimewindow 10
10.101.101.101:/source_vol 10.101.101.101:/dest_vol


Job ID: Job_2023-11-16_23.03.41.617300_isync

 23,154 scanned, 146 removed, 1.26 GiB in (247 MiB/s), 4.50 MiB out
(882 KiB/s), 5s

 29,587 scanned, 485 removed, 4.51 GiB in (659 MiB/s), 13.4 MiB out
(1.77 MiB/s), 10s

 29,587 scanned, 485 removed, 7.40 GiB in (590 MiB/s), 20.0 MiB out
(1.32 MiB/s), 16s

 32,712 scanned, 485 removed, 10.3 GiB in (592 MiB/s), 26.9 MiB out
(1.34 MiB/s), 21s

 33,712 scanned, 485 removed, 13.2 GiB in (578 MiB/s), 33.6 MiB out
(1.33 MiB/s), 26s

 33,712 scanned, 961 copied, 485 removed, 15.5 GiB in (445 MiB/s), 86.6
MiB out (9.89 MiB/s), 31s

.

.

.

42,496 scanned, 1,000 copied, 1,000 removed, 233 GiB in (655 MiB/s),
581 MiB out (1.43 MiB/s), 7m11s


Xcp command : xcp isync -mtimewindow 10 -loglevel DEBUG
10.101.101.101:/source_vol 10.101.101.101:/dest_vol

Stats       : 1,000 removed, 42,496 scanned, 1,000 copied

Speed       : 234 GiB in (554 MiB/s), 583 MiB out (1.35 MiB/s)

Total Time  : 7m12s.

Job ID      : Job_2023-11-16_23.03.41.617300_isync
```

```
Log Path    : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.03.41.617300_isync.log

Error Path  : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.03.41.617300_isync.error

STATUS      : PASSED
```

**iSync-Match <filter>** 를 참조하십시오

를 사용합니다 `-match <filter>` 매개 변수 `isync` 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

구문

```
xcp isync  -match <filter> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync -match fnm("FILE_USER5*")
<source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Job ID: Job_2023-11-16_23.25.03.734323_isync
24,006 scanned, 570 matched, 32.5 MiB in (5.31 MiB/s), 221 KiB out
(36.2 KiB/s), 6s
33,012 scanned, 570 matched, 34.2 MiB in (223 KiB/s), 237 KiB out (2.06
KiB/s), 14s
33,149 scanned, 572 matched, 275 MiB in (38.3 MiB/s), 781 KiB out (86.6
KiB/s), 20s
39,965 scanned, 572 matched, 276 MiB in (214 KiB/s), 812 KiB out (4.95
KiB/s), 27s
40,542 scanned, 572 matched, 276 MiB in (15.4 KiB/s), 818 KiB out (1.00
KiB/s), 32s
40,765 scanned, 1,024 matched, 1.88 GiB in (297 MiB/s), 4.51 MiB out
(682 KiB/s), 38s
target scan completed: 41,125 scanned, 1,055 matched, 1.88 GiB in (48.9
MiB/s), 4.51 MiB out
(117 KiB/s), 39s.
42,372 scanned, 1,206 matched, 4.26 GiB in (445 MiB/s), 9.92 MiB out
(1013 KiB/s), 43s
Filtered: 1206 matched, 41290 did not match
Xcp command : xcp isync -match fnm("FILE_USER5*")
<source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 42,496 scanned, 1,206 matched
Speed : 6.70 GiB in (145 MiB/s), 15.4 MiB out (332 KiB/s)
Total Time : 47s.
Job ID : Job_2023-11-16_23.25.03.734323_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.25.03.734323_isync.log
STATUS : PASSED
```

**iSync - BS <n[k]> 를 참조하십시오**

를 사용합니다 `-bs <n[k]>` 매개 변수 `isync` 명령을 사용하여 읽기/쓰기 블록 크기를 지정합니다. 기본 블록 크기는
64K입니다.

구문

```
xcp isync -loglevel DEBUG -bs <n[k]> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
root@client1 linux]# ./xcp isync -loglevel DEBUG -bs 32k
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

Job ID: Job_2023-11-17_00.49.20.336389_isync
20,616 scanned, 1.62 GiB in (332 MiB/s), 8.23 MiB out (1.64 MiB/s), 5s
30,240 scanned, 4.55 GiB in (594 MiB/s), 22.4 MiB out (2.81 MiB/s), 10s
30,439 scanned, 7.47 GiB in (589 MiB/s), 35.6 MiB out (2.60 MiB/s), 15s
30,439 scanned, 10.5 GiB in (617 MiB/s), 49.5 MiB out (2.75 MiB/s), 20s
30,863 scanned, 1 copied, 13.3 GiB in (547 MiB/s), 62.7 MiB out (2.56
MiB/s), 25s
.
.
.
42,497 scanned, 71 copied, 227 GiB in (637 MiB/s), 5.12 GiB out (2.79
MiB/s), 6m40s
42,497 scanned, 71 copied, 229 GiB in (538 MiB/s), 5.13 GiB out (2.35
MiB/s), 6m45s
Xcp command : xcp isync -loglevel DEBUG -bs 32k
<source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 42,497 scanned, 71 copied
Speed : 231 GiB in (579 MiB/s), 5.14 GiB out (12.9 MiB/s)
Total Time : 6m48s.
Job ID : Job_2023-11-17_00.49.20.336389_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
17_00.49.20.336389_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
17_00.49.20.336389_isync.error
STATUS : PASSED
[root@client1 linux]#
```

**iSync - 병렬**

를 사용합니다 `-parallel <n>` 매개 변수 `isync` 최대 동시 배치 프로세스 수를 지정하는 명령입니다. 기본값은 7입니다.

구문

```
xcp isync -parallel <n> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
[root@client1 linux]# xcp isync -parallel 16
<source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol

Job ID: Job_2023-11-16_23.25.57.058655_isync
21,279 scanned, 765 MiB in (104 MiB/s), 2.43 MiB out (337 KiB/s), 7s
30,208 scanned, 126 removed, 3.00 GiB in (461 MiB/s), 9.11 MiB out
(1.33 MiB/s), 12s
35,062 scanned, 592 removed, 6.01 GiB in (615 MiB/s), 17.2 MiB out
(1.61 MiB/s), 17s
35,062 scanned, 592 removed, 7.35 GiB in (272 MiB/s), 20.3 MiB out (642
KiB/s), 22s
.
.
.
42,496 scanned, 1,027 copied, 1,027 removed, 231 GiB in (602 MiB/s),
576 MiB out (1.31 MiB/s),
7m40s
Xcp command : xcp isync -parallel 16 <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 1,027 removed, 42,496 scanned, 1,027 copied
Speed : 234 GiB in (515 MiB/s), 584 MiB out (1.26 MiB/s)
Total Time : 7m45s.
Job ID : Job_2023-11-16_23.25.57.058655_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.25.57.058655_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.25.57.058655_isync.error
STATUS : PASSED
```

**iSync - dircount <n[k]> 를 참조하십시오**

를 사용합니다 `-dircount <n[k]>` 매개 변수 `isync` 명령을 사용하여 디렉토리를 읽을 때 요청 크기를 지정합니다. 기본값은 64k입니다.

구문

```
xcp isync -dircount <n[k]> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

```
root@client1 linux]# ./xcp isync -dircount 32k
<source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Job ID: Job_2023-11-16_23.33.45.854686_isync
16,086 scanned, 824 MiB in (164 MiB/s), 2.75 MiB out (558 KiB/s), 5s
24,916 scanned, 4.42 GiB in (727 MiB/s), 12.5 MiB out (1.91 MiB/s), 11s
31,633 scanned, 237 removed, 7.19 GiB in (567 MiB/s), 19.0 MiB out
(1.30 MiB/s), 16s
31,633 scanned, 237 removed, 9.74 GiB in (512 MiB/s), 24.7 MiB out
(1.13 MiB/s), 21s
33,434 scanned, 237 removed, 11.6 GiB in (385 MiB/s), 29.3 MiB out (935
KiB/s), 26s
33,434 scanned, 499 copied, 237 removed, 13.1 GiB in (298 MiB/s), 57.7
MiB out (5.66 MiB/s), 31s
.
.
.
42,496 scanned, 1,000 copied, 1,000 removed, 229 GiB in (609 MiB/s),
572 MiB out (1.34 MiB/s),
7m3s
42,496 scanned, 1,000 copied, 1,000 removed, 232 GiB in (549 MiB/s),
578 MiB out (1.20 MiB/s),
7m8s
Xcp command : xcp isync -dircount 32k <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 1,000 removed, 42,496 scanned, 1,000 copied
Speed : 234 GiB in (555 MiB/s), 583 MiB out (1.35 MiB/s)
Total Time : 7m11s.
Job ID : Job_2023-11-16_23.33.45.854686_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.33.45.854686_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.33.45.854686_isync.error
STATUS : PASSED
```

**iSync - <filter> 제외**

를 사용합니다 `-exclude <filter>` 매개 변수 `isync` 필터와 일치하는 파일 및 디렉토리를 제외하는 명령입니다.

## 구문

```
xcp isync -exclude <filter> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

## 예제 보기

```
[root@client1 linux]# ./xcp isync -exclude fnm("FILE_USER5*")
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol
Job ID: Job_2023-11-16_23.41.00.713151_isync
14,514 scanned, 570 excluded, 675 MiB in (133 MiB/s), 2.03 MiB out (411
KiB/s), 5s
24,211 scanned, 570 excluded, 4.17 GiB in (713 MiB/s), 11.0 MiB out
(1.79 MiB/s), 10s
30,786 scanned, 574 excluded, 116 removed, 7.07 GiB in (589 MiB/s),
17.7 MiB out (1.32
MiB/s), 15s
30,786 scanned, 574 excluded, 116 removed, 10.1 GiB in (629 MiB/s),
24.7 MiB out (1.40
MiB/s), 20s
31,106 scanned, 222 copied, 574 excluded, 116 removed, 12.8 GiB in (510
MiB/s), 42.3 MiB out
(3.33 MiB/s), 26s
.
.
.
41,316 scanned, 1,000 copied, 1,206 excluded, 1,000 removed, 225 GiB in
(616 MiB/s), 563 MiB
out (1.36 MiB/s), 6m35s
Excluded: 1206 excluded, 0 did not match exclude criteria
Xcp command : xcp isync -exclude fnm("FILE_USER5*")
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol
Stats : 1,000 removed, 41,316 scanned, 1,000 copied, 1,206 excluded
Speed : 227 GiB in (584 MiB/s), 568 MiB out (1.42 MiB/s)
Total Time : 6m38s.
Job ID : Job_2023-11-16_23.41.00.713151_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.41.00.713151_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_23.41.00.713151_isync.error
STATUS : PASSED
```

**iSync-newid <name>** 를 참조하십시오

를 사용합니다 `-newid <name>` 매개 변수 `isync` 새 인덱스 카탈로그의 카탈로그 이름을 지정하는 명령입니다.

구문

```
xcp isync -newid <name> -s3.endpoint <S3_endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
```

예제 보기

```
root@client1 linux]# ./xcp isync -newid testing -s3.endpoint
<S3_endpoint_url> <source_ip_address>:/src/USER4 s3://isyncestimate/

Job ID: Job_2023-11-16_04.33.32.381458_isync
target scan completed: 502 scanned, 250 s3.objects, 251 indexed, 118
KiB in (38.9 KiB/s), 63.7
KiB out (20.9 KiB/s), 3s.
Xcp command : xcp isync -newid testing -s3.endpoint S3_endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
Stats : 502 scanned, 250 s3.objects, 251 indexed
Speed : 118 KiB in (38.8 KiB/s), 63.7 KiB out (20.9 KiB/s)
Total Time : 3s.
Job ID : Job_2023-11-16_04.33.32.381458_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_04.33.32.381458_isync.log
STATUS : PASSED
```

**iSync - 로그 수준 <name>**

를 사용합니다 `-loglevel <name>` 매개 변수 `isync` 로그 레벨을 설정하는 명령입니다. 사용 가능한 레벨은 Info 및 debug입니다. 기본값은 Info 입니다.

구문

```
xcp isync -loglevel <name> -bs <n[k]> <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@client1 linux]# ./xcp isync -loglevel DEBUG -bs 32k
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

Job ID: Job_2023-11-17_00.49.20.336389_isync
20,616 scanned, 1.62 GiB in (332 MiB/s), 8.23 MiB out (1.64 MiB/s), 5s
30,240 scanned, 4.55 GiB in (594 MiB/s), 22.4 MiB out (2.81 MiB/s), 10s
30,439 scanned, 7.47 GiB in (589 MiB/s), 35.6 MiB out (2.60 MiB/s), 15s
30,439 scanned, 10.5 GiB in (617 MiB/s), 49.5 MiB out (2.75 MiB/s), 20s
30,863 scanned, 1 copied, 13.3 GiB in (547 MiB/s), 62.7 MiB out (2.56
MiB/s), 25s
.
.
.
42,497 scanned, 71 copied, 227 GiB in (637 MiB/s), 5.12 GiB out (2.79
MiB/s), 6m40s
42,497 scanned, 71 copied, 229 GiB in (538 MiB/s), 5.13 GiB out (2.35
MiB/s), 6m45s
Xcp command : xcp isync -loglevel DEBUG -bs 32k
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol
Stats : 42,497 scanned, 71 copied
Speed : 231 GiB in (579 MiB/s), 5.14 GiB out (12.9 MiB/s)
Total Time : 6m48s.
Job ID : Job_2023-11-17_00.49.20.336389_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
17_00.49.20.336389_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
17_00.49.20.336389_isync.error
STATUS : PASSED
```

**iSync-preserve-atime** 을 참조하십시오

를 사용합니다 `-preserve-atime` 매개 변수 `isync` 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복구하는
명령입니다.

구문

```
xcp isync -preserve-atime <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
```

예제 보기

```
[root@client1 linux]# ./xcp isync -preserve-atime
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

Job ID: Job_2023-11-17_01.31.26.077154_isync
21,649 scanned, 1.41 GiB in (260 MiB/s), 5.63 MiB out (1.01 MiB/s), 5s
32,034 scanned, 10.9 GiB in (400 MiB/s), 29.3 MiB out (925 KiB/s), 30s
33,950 scanned, 1 copied, 12.9 GiB in (399 MiB/s), 35.5 MiB out (1.24
MiB/s), 35s
33,950 scanned, 1 copied, 14.7 GiB in (361 MiB/s), 39.6 MiB out (830
KiB/s), 41s
.
.
.
42,499 scanned, 1 copied, 229 GiB in (623 MiB/s), 529 MiB out (1.37
MiB/s), 7m16s
42,499 scanned, 1 copied, 233 GiB in (719 MiB/s), 536 MiB out (1.56
MiB/s), 7m21s
Xcp command : xcp isync -preserve-atime <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 42,499 scanned, 1 copied
Speed : 234 GiB in (541 MiB/s), 540 MiB out (1.22 MiB/s)
Total Time : 7m23s.
Job ID : Job_2023-11-17_01.31.26.077154_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
17_01.31.26.077154_isync.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
17_01.31.26.077154_isync.error
STATUS : PASSED
```

**iSync -s3.insecure 참조하십시오**

를 사용합니다 `-s3.insecure` 매개 변수 `isync` S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 명령

구문

```
xcp isync -newid <name> -s3.insecure -s3.endpoint <S3_endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
```

예제 보기

```
[root@client1 linux]# ./xcp isync -newid testing2 -s3.insecure
-s3.endpoint <S3_endpoint_url> <source_ip_address>:/src/USER4
s3://isyncestimate/

Job ID: Job_2023-11-16_05.09.28.579606_isync
target scan completed: 502 scanned, 250 s3.objects, 118 KiB in (47.6
KiB/s), 50.8 KiB out (20.5
KiB/s), 2s.
Xcp command : xcp isync -newid testing2 -s3.insecure -s3.endpoint
<S3_endpoint_url> <source_ip_address>:/src/USER4 s3://isyncestimate/
Stats : 502 scanned, 250 s3.objects, 251 indexed
Speed : 118 KiB in (38.5 KiB/s), 63.8 KiB out (20.7 KiB/s)
Total Time : 3s.
Job ID : Job_2023-11-16_05.09.28.579606_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_05.09.28.579606_isync.log
STATUS : PASSED
[root@client1 linux]#
```

**iSync-S3.Endpoint <s3_endpoint_url> 를 참조하십시오**

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수 `isync` S3 버킷 통신을 위해 지정된 URL로 기본 AWS 끝점 URL을 재정의하는 명령입니다.

구문

```
xcp isync -newid <name> -s3.noverify -s3.endpoint <endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
```

예제 보기

```
root@client1 linux]# ./xcp isync -newid testing -s3.endpoint <S3-
endpoint_url> <source_ip_address>:/src/USER4 s3://isyncestimate/

Job ID: Job_2023-11-16_04.33.32.381458_isync
target scan completed: 502 scanned, 250 s3.objects, 251 indexed, 118
KiB in (38.9 KiB/s), 63.7 KiB
out (20.9 KiB/s), 3s.
Xcp command : xcp isync -newid testing -s3.endpoint S3-endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
Stats : 502 scanned, 250 s3.objects, 251 indexed
Speed : 118 KiB in (38.8 KiB/s), 63.7 KiB out (20.9 KiB/s)
Total Time : 3s.
Job ID : Job_2023-11-16_04.33.32.381458_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_04.33.32.381458_isync.log
STATUS : PASSED
```

**iSync -s3.profile <name>** 를 참조하십시오

를 사용합니다 `s3.profile` 매개 변수 `isync` S3 버킷 통신에 사용할 AWS 자격 증명 파일에서 프로필을 지정하는 명령

구문

```
xcp isync -s3.profile <name> -s3.endpoint <S3-endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate
```

예제 보기

```
[root@client1 linux]# /xcp/linux/xcp isync -s3.profile s3_profile
-s3.endpoint <S3-endpoint_url> <source_ip_address>:/src/USER4
s3://isyncestimate

Job ID: Job_2023-11-16_05.29.21.279709_isync
target scan completed: 502 scanned, 250 s3.objects, 108 KiB in (46.5
KiB/s), 38.4 KiB out (16.5
KiB/s), 2s.
Xcp command : xcp isync -s3.profile s3_profile -s3. <S3-endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate
Stats : 502 scanned, 250 s3.objects
Speed : 108 KiB in (34.2 KiB/s), 38.4 KiB out (12.1 KiB/s)
Total Time : 3s.
Job ID : Job_2023-11-16_05.29.21.279709_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_05.29.21.279709_isync.log
STATUS : PASSED
[root@client1 linux]#
```

**iSync -s3.noverify** 참조하십시오

를 사용합니다 `-s3.noverify` 매개 변수 `isync` S3 버킷 통신에 대한 SSL 인증의 기본 검증을 재정의하는
명령입니다.

구문

```
xcp isync -newid <name> -s3.noverify -s3.endpoint <endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
```

예제 보기

```
root@client1 linux]# ./xcp isync -newid testing5 -s3.noverify
-s3.endpoint <endpoint_url> <source_ip_address>:/src/USER4
s3://isyncestimate/

Job ID: Job_2023-11-16_05.11.12.803441_isync
target scan completed: 502 scanned, 250 s3.objects, 118 KiB in (40.8
KiB/s), 50.8 KiB out (17.6
KiB/s), 2s.
Xcp command : xcp isync -newid testing5 -s3.noverify -s3.endpoint
<endpoint_url>
<source_ip_address>:/src/USER4 s3://isyncestimate/
Stats : 502 scanned, 250 s3.objects, 251 indexed
Speed : 118 KiB in (34.7 KiB/s), 63.8 KiB out (18.6 KiB/s)
Total Time : 3s.
Job ID : Job_2023-11-16_05.11.12.803441_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_05.11.12.803441_isync.log
STATUS : PASSED
[root@client1 linux]#
```

**iSync 추정값입니다**

를 클릭합니다 `isync` 명령을 와 함께 사용할 수 있습니다 `estimate` 에 걸리는 시간을 예측하는 옵션입니다 `isync` 증분 변경 내용을 동기화하는 명령입니다. 를 클릭합니다 `-id` 매개 변수는 이전 복사 작업의 카탈로그 이름을 지정합니다.

구문

```
xcp isync estimate -id <name>
```

> ⓘ  를 클릭합니다 `-id` 매개 변수는 에 필요합니다 `isync estimate` 명령 옵션.

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -id <name>

Job ID: Job_2023-11-20_04.08.18.967541_isync_estimate
Index: aa1batch_error1 {source: <source_ip_address>:/src, target:
<destination_ip_address>:/dest}
30,611 scanned, 786 MiB in (141 MiB/s), 3.60 MiB out (661 KiB/s), 5s
45,958 scanned, 1.92 GiB in (223 MiB/s), 8.48 MiB out (939 KiB/s), 10s
53,825 scanned, 3.11 GiB in (216 MiB/s), 13.5 MiB out (912 KiB/s), 16s
67,260 scanned, 4.33 GiB in (231 MiB/s), 18.6 MiB out (961 KiB/s), 22s
81,328 scanned, 5.57 GiB in (253 MiB/s), 23.8 MiB out (1.05 MiB/s), 27s
85,697 scanned, 6.85 GiB in (241 MiB/s), 29.2 MiB out (1005 KiB/s), 32s
85,697 scanned, 8.14 GiB in (262 MiB/s), 34.5 MiB out (1.06 MiB/s), 37s
Xcp command : xcp isync estimate -id <name>
Estimated Time : 45.1s
Job ID : Job_2023-11-20_04.08.18.967541_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
20_04.08.18.967541_isync_estimate.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
20_04.08.18.967541_isync_estimate.error
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `isync estimate` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| iSync Estimate - NoData의 약어입니다 | 데이터를 확인하지 않습니다. |
| iSync Estimate - noattrs 를 참조하십시오 | 특성을 검사하지 않습니다. |
| iSync 견적 - nomods | 파일 수정 시간을 확인하지 않습니다. |
| <<nfs_isync_estimate_mtimewindow,iSync 추정 - mtimewindow | 확인을 위해 허용되는 수정 시간 차이를 지정합니다. |
| <<nfs_isync_estimate_match,iSync 견적 - 일치(), 필터(), | 필터와 일치하는 파일 및 디렉토리만 처리합니다. |
| iSync 견적 - BS 및 Lt; n[k] 및 GT; | 읽기/쓰기 블록 크기를 지정합니다(기본값: 64k). |
| <<nfs_isync_estimate_parallel,iSync 견적 - 병렬();n | 동시 배치 프로세스의 최대 수를 지정합니다(기본값: 7). |
| <<nfs_isync_estimate_dircount,iSync 견적 - dircount n[k] | 디렉터리를 읽을 때 요청 크기를 지정합니다(기본값 64k). |
| <<nfs_isync_estimate_exclude,iSync 견적 - 제외(), 필터(), | 필터와 일치하는 파일 및 디렉토리를 제외합니다. |
| <<nfs_isync_estimate_id,iSync Estimate-id | 이전 복사 작업의 카탈로그 이름을 지정합니다. |

| 매개 변수 | 설명 |
|---|---|
| <<nfs_isync_estimate_loglevel,iSync Estimate - LogLevel 이름 GT; | 로그 레벨을 설정합니다. 사용 가능한 레벨은 Info, debug(기본값: Info)입니다. |
| iSync Estimate-preserve-atime 을 참조하십시오 | 모든 파일을 소스에서 마지막으로 액세스한 날짜로 복원합니다. |
| iSync Estimate -s3.insecure 을 참조하십시오 | S3 버킷 통신에 HTTPS 대신 HTTP를 사용하는 옵션을 제공합니다. |
| iSync Estimate - s3.endpoint | 기본 AWS(Amazon Web Services) 끝점 URL을 S3 버킷 통신에 대해 지정된 URL로 재정의합니다. |
| <<nfs_isync_estimate_s3_profile,iSync -s3.profile 및 lt;profile_name | S3 버킷 통신을 위해 AWS 자격 증명 파일에서 프로필을 지정합니다. |
| iSync Estimate -s3.noverify 을 참조하십시오 | S3 버킷 통신에 대한 SSL 인증의 기본 확인을 재정의합니다. |

**iSync Estimate - NoData**의 약어입니다

를 사용합니다 `-nodata` 매개 변수가 포함된 경우 `isync estimate` 데이터를 검사하지 않도록 지정합니다.

구문

```
xcp isync estimate -nodata -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -nodata -id <name>

Job ID: Job_2023-11-23_23.19.45.648691_isync_estimate
Index: isync_est {source: <source_ip_address>:/fg1, target:
<destination_ip_address>:/fv}
Xcp command : xcp isync estimate -nodata -id <name>
Estimated Time : 0.6s
Job ID : Job_2023-11-23_23.19.45.648691_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
23_23.19.45.648691_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate - noattrs** 를 참조하십시오

를 사용합니다 `-noattrs` 매개 변수가 포함된 경우 `isync estimate` 속성을 검사하지 않도록 지정합니다.

구문

```
xcp isync estimate -noattrs -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -noattrs -id <name>

Job ID: Job_2023-11-23_23.20.25.042500_isync_estimate
Index: isync_est {source: <source_ip_address>:/fg1, target:
<target_ip_address>:/fv}
Xcp command : xcp isync estimate -noattrs -id <name>
Estimated Time : 2.4s
Job ID : Job_2023-11-23_23.20.25.042500_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
23_23.20.25.042500_isync_estimate.log
STATUS : PASSED
```

**iSync 견적 - nomods**

를 사용합니다 `-nomods` 매개 변수가 포함된 경우 `isync estimate` 파일 수정 시간을 확인하지 않도록 지정합니다.

구문

```
xcp isync estimate -nomods -id <name>
```

## 예제 보기

```
[root@client1 linux]# ./xcp isync -nomodes
<source_ip_address>:/source_vol <destination_ip_address>:/dest_vol

Job ID: Job_2023-11-16_22.56.48.571392_isync
13,897 scanned, 763 MiB in (152 MiB/s), 2.28 MiB out (463 KiB/s), 5s
21,393 scanned, 148 removed, 4.81 GiB in (739 MiB/s), 12.5 MiB out
(1.81 MiB/s), 11s
28,517 scanned, 148 removed, 7.68 GiB in (578 MiB/s), 19.1 MiB out
(1.31 MiB/s), 16s
28,517 scanned, 148 removed, 10.7 GiB in (619 MiB/s), 26.3 MiB out
(1.43 MiB/s), 21s
29,167 scanned, 396 copied, 148 removed, 13.2 GiB in (434 MiB/s), 51.4
MiB out (4.33 MiB/s), 27s
.
.
.
42,790 scanned, 1,000 copied, 1,000 removed, 229 GiB in (641 MiB/s),
571 MiB out (1.40 MiB/s),
6m42s
42,790 scanned, 1,000 copied, 1,000 removed, 232 GiB in (668 MiB/s),
578 MiB out (1.46 MiB/s),
6m47s
Xcp command : xcp isync -nomods <source_ip_address>:/source_vol
<destination_ip_address>:/dest_vol
Stats : 1,000 removed, 42,790 scanned, 1,000 copied
Speed : 234 GiB in (585 MiB/s), 583 MiB out (1.42 MiB/s)
Total Time : 6m50s.
Job ID : Job_2023-11-16_22.56.48.571392_isync
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_22.56.48.571392_isync.log
STATUS : PASSED
```

**iSync 예상 - mtimewindow \<s>**

를 사용합니다 `-mtimewindow <s>` 매개 변수가 포함된 경우 `isync estimate` 확인을 위해 허용되는 수정 시간 차이를 지정합니다.

구문

```
xcp isync estimate -mtimewindow <s> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -mtimewindow 10 -id <name>

Job ID: Job_2023-11-16_01.47.05.139847_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Xcp command : xcp isync estimate -mtimewindow 10 -id <name>
Estimated Time : 2m42s
Job ID : Job_2023-11-16_01.47.05.139847_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_01.47.05.139847_isync_estimate.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_01.47.05.139847_isync_estimate.error
STATUS : PASSED
```

**iSync Estimate - Match <filter>** 를 참조하십시오

를 사용합니다 `-match <filter>` 매개 변수가 포함된 경우 `isync estimate` 필터와 일치하는 파일 및
디렉토리만 처리합니다.

구문

```
xcp isync estimate -match <filter> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -match <filter> -id <name>

Job ID: Job_2023-11-16_02.13.34.904794_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Filtered: 0 matched, 6 did not match
Xcp command : xcp isync estimate -match fnm('FILE_*') -id <name>
Estimated Time : 0.8s
Job ID : Job_2023-11-16_02.13.34.904794_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.13.34.904794_isync_estimate.log
STATUS : PASSED
```

**iSync 예상 - BS <n[k]>**

를 사용합니다 `-bs <n[k]>` 매개 변수가 포함된 경우 `isync estimate` 읽기/쓰기 블록 크기를 지정합니다. 기본 블록 크기는 64K입니다.

구문

```
xcp isync estimate -bs <n[k]> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -bs 128k -id <name>

Job ID: Job_2023-11-16_02.14.21.263618_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Xcp command : xcp isync estimate -bs 128k -id <name>
Estimated Time : 6m48s
Job ID : Job_2023-11-16_02.14.21.263618_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.14.21.263618_isync_estimate.log
STATUS : PASSED
```

**iSync 추정 - 병렬**

를 사용합니다 `-parallel <n>` 매개 변수가 포함된 경우 `isync estimate` 동시 배치 프로세스의 최대 수를 지정합니다. 기본값은 7입니다.

구문

```
xcp isync estimate -parallel <n> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -parallel 10 -id <name>

Job ID: Job_2023-11-16_02.15.25.109554_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Xcp command : xcp isync estimate -parallel 10 -id <name>
Estimated Time : 8m3s
Job ID : Job_2023-11-16_02.15.25.109554_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.15.25.109554_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate - dircount <n[k]>** 를 참조하십시오

를 사용합니다 `-dircount <n[k]>` 매개 변수가 포함된 경우 `isync estimate` 디렉토리를 읽을 때 요청 크기를
지정합니다. 기본값은 64k입니다.

구문

```
xcp isync estimate -dircount <n[k]> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -dircount 128k -id <name>

Job ID: Job_2023-11-16_02.15.56.200697_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Xcp command : xcp isync estimate -dircount 128k -id <name>
Estimated Time : 8m6s
Job ID : Job_2023-11-16_02.15.56.200697_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.15.56.200697_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate - <filter> 제외**

를 사용합니다 `-exclude <filter>` 매개 변수가 포함된 경우 `isync estimate` 필터와 일치하는 파일 및
디렉토리를 제외합니다.

구문

```
xcp isync estimate -exclude <filter> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -exclude "fnm('DIR1*')" -id
<name>

Job ID: Job_2023-11-16_02.16.30.449378_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Excluded: 60 excluded, 0 did not match exclude criteria
Xcp command : xcp isync estimate -exclude fnm('DIR1*') -id <name>
Estimated Time : 3m29s
Job ID : Job_2023-11-16_02.16.30.449378_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.16.30.449378_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate-id <name>** 를 참조하십시오

를 사용합니다 `-id <name>` 매개 변수가 포함된 경우 `isync estimate` 카탈로그 이름을 지정하려면 이전 복사
작업을 pf로 지정합니다.

구문

```
xcp isync estimate -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -id <name>

Job ID: Job_2023-11-20_04.08.18.967541_isync_estimate
Index: <name> {source: <source_ip_address>:/src, target:
<destination_ip_address>:/dest}
30,611 scanned, 786 MiB in (141 MiB/s), 3.60 MiB out (661 KiB/s), 5s
45,958 scanned, 1.92 GiB in (223 MiB/s), 8.48 MiB out (939 KiB/s), 10s
53,825 scanned, 3.11 GiB in (216 MiB/s), 13.5 MiB out (912 KiB/s), 16s
67,260 scanned, 4.33 GiB in (231 MiB/s), 18.6 MiB out (961 KiB/s), 22s
81,328 scanned, 5.57 GiB in (253 MiB/s), 23.8 MiB out (1.05 MiB/s), 27s
85,697 scanned, 6.85 GiB in (241 MiB/s), 29.2 MiB out (1005 KiB/s), 32s
85,697 scanned, 8.14 GiB in (262 MiB/s), 34.5 MiB out (1.06 MiB/s), 37s
Xcp command : xcp isync estimate -id <name>
Estimated Time : 45.1s
Job ID : Job_2023-11-20_04.08.18.967541_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
20_04.08.18.967541_isync_estimate.log
Error Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
20_04.08.18.967541_isync_estimate.error
STATUS : PASSED
```

**iSync Estimate - 로그 레벨 <name>**

를 사용합니다 `-loglevel <name>` 매개 변수가 포함된 경우 `isync estimate` 로그 레벨을 설정하려면 Info 및 debug 레벨을 사용할 수 있습니다. 기본값은 Info 입니다.

구문

```
xcp isync estimate -loglevel <name> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -loglevel DEBUG -id <name>

Job ID: Job_2023-11-16_02.16.58.212518_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Xcp command : xcp isync estimate -loglevel DEBUG -id <name>
Estimated Time : 8m18s
Job ID : Job_2023-11-16_02.16.58.212518_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.16.58.212518_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate-preserve-atime** 을 참조하십시오

를 사용합니다 `-preserve-atime` 매개 변수가 포함된 경우 `isync estimate` 모든 파일을 소스에서 마지막으로
액세스한 날짜로 복원합니다.

구문

```
xcp isync estimate -preserve-atime -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -preserve-atime -id <name>

Job ID: Job_2023-11-16_02.17.32.085754_isync_estimate
Index: <name> {source: <source_ip_address>:/source_vol, target:
<destination_ip_address>:/dest_vol}
Xcp command : xcp isync estimate -preserve-atime -id <name>
Estimated Time : 8m26s
Job ID : Job_2023-11-16_02.17.32.085754_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.17.32.085754_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate -s3.insecure** 을 참조하십시오

를 사용합니다 `-s3.insecure` 매개 변수가 포함된 경우 `isync estimate` S3 버킷 통신에 HTTPS 대신 HTTP를
사용하는 경우

```
xcp isync estimate -s3.insecure -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -s3.insecure -id S3_index

Job ID: Job_2023-11-16_02.22.36.481539_isync_estimate
Index: S3_index {source: <source_ip_address>:/source_vol/USER5, target:
s3://
xcptesting/test_ankit/}
2,002 scanned, 432 KiB in (86.1 KiB/s), 5.53 KiB out (1.10 KiB/s), 5s
2,002 scanned, 432 KiB in (0/s), 5.53 KiB out (0/s), 10s
Xcp command : xcp isync estimate -s3.insecure -id S3_index
Estimated Time : 9.4s
Job ID : Job_2023-11-16_02.22.36.481539_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.22.36.481539_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate - s3.endpoint <s3_endpoint_url>**를 참조하십시오

를 사용합니다 `-s3.endpoint <s3_endpoint_url>` 매개 변수가 포함된 경우 `isync estimate` S3 버킷 통신을 위해 지정된 URL로 기본 AWS 끝점 URL을 재정의합니다.

구문

```
xcp isync estimate -s3.endpoint <S3_endpoint_url> -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -s3.endpoint
<S3_endpoint_url> -id S3_index1

Job ID: Job_2023-11-16_02.35.49.911194_isync_estimate
Index: S3_index1 {source: <source_ip_address>:/source_vol/USER5,
target: s3://isyncestimate/}
2,002 scanned, 432 KiB in (85.6 KiB/s), 5.54 KiB out (1.10 KiB/s), 5s
2,002 scanned, 432 KiB in (0/s), 5.54 KiB out (0/s), 10s
Xcp command : xcp isync estimate -s3.endpoint <S3_endpoint_url> -id
S3_index1
Estimated Time : 13.3s
Job ID : Job_2023-11-16_02.35.49.911194_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.35.49.911194_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate -s3.profile \<name\>** 를 참조하십시오

를 사용합니다 `s3.profile` 매개 변수가 포함된 경우 `isync estimate` S3 버킷 통신을 위해 AWS 자격 증명
파일에서 프로필을 지정합니다.

구문

```
xcp isync estimate -s3.profile s3_profile -id <name>
```

예제 보기

```
[root@client1 linux]# ./xcp isync estimate -s3.profile s3_profile -id
S3_index

Job ID: Job_2023-11-16_02.25.57.045692_isync_estimate
Index: S3_index {source: <source_ip_address>:/source_vol/USER5, target:
s3://
xcptesting/test_ankit/}
2,002 scanned, 432 KiB in (84.9 KiB/s), 5.53 KiB out (1.09 KiB/s), 5s
2,002 scanned, 432 KiB in (0/s), 5.53 KiB out (0/s), 10s
Xcp command : xcp isync estimate -s3.profile s3_profile -id S3_index
Estimated Time : 9.7s
Job ID : Job_2023-11-16_02.25.57.045692_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.25.57.045692_isync_estimate.log
STATUS : PASSED
```

**iSync Estimate -s3.noverify** 을 참조하십시오

를 사용합니다 `-s3.noverify` 매개 변수가 포함된 경우 `isync estimate` S3 버킷 통신에 대한 SSL 인증의 기본
확인을 재정의합니다.

구문

```
xcp isync estimate -s3.noverify -id <name>
```

```
[root@client1 linux]# ./xcp isync estimate -s3.noverify -id S3_index

Job ID: Job_2023-11-16_02.23.36.515890_isync_estimate
Index: S3_index {source: <source_ip_address>:/source_vol/USER5, target:
s3://
xcptesting/test_ankit/}
2,002 scanned, 432 KiB in (85.7 KiB/s), 5.53 KiB out (1.10 KiB/s), 5s
2,002 scanned, 432 KiB in (0/s), 5.53 KiB out (0/s), 10s
Xcp command : xcp isync estimate -s3.noverify -id S3_index
Estimated Time : 9.3s
Job ID : Job_2023-11-16_02.23.36.515890_isync_estimate
Log Path : /opt/NetApp/xFiles/xcp/xcplogs/Job_2023-11-
16_02.23.36.515890_isync_estimate.log
STATUS : PASSED
```

# smb 명령 참조

도움말

SMB입니다 `help` Command 명령 명령 목록, 명령 매개 변수 및 각 매개 변수에 대한 간략한 설명을 표시합니다. 이 명령은 XCP를 처음 사용하는 초보자에게 매우 유용합니다.

구문

```
xcp --help
```

예제 보기

```
C:\Users\Administrator\Desktop\xcp>xcp --help
usage: xcp [-h] [-version]

{scan,show,listen,configure,copy,sync,verify,license,activate,help}
            ...
optional arguments:
  -h, --help        show this help message and exit
  -version          show program's version number and exit

XCP commands:
  {scan,show,listen,configure,copy,sync,verify,license,activate,help}
    scan            Read all the files in a file tree
    show            Request information from host about SMB shares
    listen          Run xcp service
    configure       Configure xcp.ini file
    copy            Recursively copy everything from source to target
    sync            Sync target with source
    verify          Verify that the target is the same as the source
    license         Show xcp license info
    activate        Activate a license on the current host
    help            Show help for commands
```

도움말 **<command>**

<command>를 와 함께 사용합니다 `help` 지정된 <command>에 대한 예제 및 옵션 세부 정보를 표시합니다.

구문

```
xcp help <command>
```

다음 출력 예제에서는 의 세부 정보, 사용, 인수 및 선택적 인수를 보여 줍니다 `sync` 명령.

예제 보기

```
C:\Users\Administrator\Desktop\xcp>xcp help sync
usage: xcp sync [-h] [-v] [-parallel <n>] [-match <filter>] [-preserve-
atime]
[-noatime] [-noctime] [-nomtime] [-noattrs]
[-noownership] [-atimewindow <float>] [-ctimewindow <float>]
[-mtimewindow <float>] [-acl] [-fallback-user FALLBACK_USER]
[-fallback-group FALLBACK_GROUP] [-l]
source target
Note: ONTAP does not let a SMB client modify COMPRESSED or ENCRYPTED
attributes.
XCP sync will ignore these file attributes.
positional arguments:
source
target
optional arguments:
-h, --help            show this help message and exit
-v                    increase debug verbosity
-parallel <n>         number of concurrent processes (default: <cpu-
count>)
-match <filter>       only process files and directories that match the
filter
                      see `xcp help -match` for details)
-preserve-atime       restore last accessed date on source
-noatime              do not check file access time
-noctime              do not check file creation time
-nomtime              do not check file modification time
-noattrs              do not check attributes
-noownership          do not check ownership
-atimewindow <float>  acceptable access time difference in seconds
-ctimewindow <float>  acceptable creation time difference in seconds
-mtimewindow <float>  acceptable modification time difference in
seconds
-acl                  copy security information
-fallback-user FALLBACK_USER
                      a user on the target machine to receive the
permissions of local
(nondomain)source machine users (eg. domain\administrator)
-fallback-group       FALLBACK_GROUP
                      a group on the target machine to receive the
permissions oflocal
(non-domain) source machine groups (eg. domain\administrators)
-l                    increase output
-root                 sync acl for root directory
C:\Users\Administrator\Desktop\xcp>
```

## 표시

SMB입니다 `show` 명령은 하나 이상의 스토리지 서버의 RPC 서비스와 NFS 내보내기를 쿼리합니다. 또한 이 명령은 사용 가능한 서비스 및 내보내기와 각 내보내기의 사용 가능한 용량 및 사용 가능한 용량을 나열한 다음 각 내보내기의 루트 속성을 나열합니다.

## 구문

를 클릭합니다 `show` 명령을 사용하려면 NFSv3 내보낸 시스템의 호스트 이름 또는 IP 주소가 필요합니다.

```
xcp show \\<IP address or hostname of SMB server>
```

예제 보기

```
C:\Users\Administrator\Desktop\xcp>xcp show \\<IP address or hostname
of SMB server>
Shares Errors Server
7 0 <IP address or hostname of SMB server>
== SMB Shares ==
Space Space Current
Free Used Connections Share Path Folder Path
0 0 N/A \\<IP address or hostname of SMB server>\IPC$ N/A
533GiB 4.72GiB 0 \\<IP address or hostname of SMB server>\ETC$ C:\etc
533GiB 4.72GiB 0 \\<IP address or hostname of SMB server>\HOME
C:\vol\vol0\home
533GiB 4.72GiB 0 \\<IP address or hostname of SMB server>\C$ C:\
972MiB 376KiB 0 \\<IP address or hostname of SMB
server>\testsecureC:\vol\testsecure
12 XCP SMB v1.6 User Guide © 2020 NetApp, Inc. All rights reserved.
47.8GiB 167MiB 1 \\<IP address or hostname of SMB server>\volxcp
C:\vol\volxcp
9.50GiB 512KiB 1 \\<IP address or hostname of SMB server>\jl C:\vol\jl
== Attributes of SMB Shares ==
Share Types Remark
IPC$ PRINTQ,IPC,SPECIAL,DEVICE Remote IPC
ETC$ SPECIAL Remote Administration
HOME DISKTREE Default Share
C$ SPECIAL Remote Administration
testsecure DISKTREE for secure copy
volxcp DISKTREE for xcpSMB
jl DISKTREE
== Permissions of SMB Shares ==
Share Entity Type
IPC$ Everyone Allow/Full Control
ETC$ Administrators Allow/FullControl
HOME Everyone Allow/Full Control
C$ Administrators Allow/Full Control

xcp show \\<IP address or hostname of SMB server>
0 errors
Total Time : 0s
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 show 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| show-v | IP 주소 또는 호스트 이름을 사용하여 SMB 서버에 대한 세부 정보를 인쇄합니다. |
| show -h,--help | 명령 사용 방법에 대한 자세한 정보를 표시합니다. |

## 라이센스

SMB입니다 `license` Command는 XCP 라이센스 정보를 표시합니다.

### 구문

```
xcp license
```

### 예제 보기

```
C:\Users\Administrator\Desktop\xcp>xcp license
xcp license
XCP <version>; (c) yyyy NetApp, Inc.; Licensed to XXX [NetApp Inc]
until Mon Dec 31 00:00:00 yyyy
License type: SANDBOX
License status: ACTIVE
Customer name: N/A
Project number: N/A
Offline Host: Yes
Send statistics: No
Host activation date: N/A
License management URL: https://xcp.netapp.com
```

## 활성화

SMB입니다 `activate` 명령을 실행하면 XCP 라이센스가 활성화됩니다. 이 명령을 실행하기 전에 라이센스 파일이 XCP 호스트 또는 클라이언트 시스템의 C:\NetApp\xCP 디렉토리에 다운로드되어 복사되었는지 확인하십시오. 라이센스는 호스트 수에 관계없이 활성화할 수 있습니다.

### 구문

```
xcp activate
```

예제 보기

```
C:\Users\Administrator\Desktop\xcp>xcp activate
XCP activated
```

## 스캔

SMB입니다 scan 명령은 전체 SMB 공유를 재귀적으로 검색하고 끝에 있는 모든 파일을 나열합니다 scan 명령.

구문

```
xcp scan \\<SMB share path>
```

예제 보기

```
C:\Users\Administrator\Desktop\xcp>xcp scan \\<IP address or hostname
of SMB server>\volxcp
c:\netapp\xcp\xcp scan \\<IP address of SMB destination
server>\source_share
volxcp\3333.txt
volxcp\SMB.txt
volxcp\SMB1.txt
volxcp\com.txt
volxcp\commands.txt
volxcp\console.txt
volxcp\linux.txt
volxcp\net use.txt
volxcp\newcom.txt
volxcp\notepad.txt
c:\netapp\xcp\xcp scan \\<IP address of SMB destination
server>\source_share
60,345 scanned, 0 matched, 0 errors
Total Time : 8s
STATUS : PASSED
C:\Users\Administrator\Desktop\xcp>Parameters
```

다음 표에는 가 나열되어 있습니다 scan 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| scan -h,--help 를 참조하십시오 | scan 명령 사용 방법에 대한 자세한 정보를 표시합니다. |

| 매개 변수 | 설명 |
|---|---|
| 스캔 - v | 디버그 세부 정보를 증가시킵니다. |
| <<smb_scan_parallel,스캔 - 병렬();n | 동시 프로세스의 수를 지정합니다(기본값: <cpu-count>). |
| <<smb_scan_match_filter,스캔 일치();필터(); | 필터와 일치하는 파일 및 디렉터리만 처리합니다. |
| <<smb_scan_exclude_filter,스캔 - 제외(); 필터(); | 필터에서 파일과 디렉터리만 제외합니다. |
| [스캔-보존-atime] | 소스에서 마지막으로 액세스한 날짜를 복원합니다. |
| <<smb_scan_depth,스캔 깊이();n | 검색 깊이를 n 레벨로 제한합니다. |
| 스캔 - 통계 | 트리 통계 보고서 형식으로 파일을 나열합니다. |
| 스캔 - HTML | 트리 통계 HTML 보고서 형식으로 파일을 나열합니다. |
| 스캔 - CSV | 트리 통계 CSV 보고서 형식으로 파일을 나열합니다. |
| scan-l(스캔 - l | 긴 목록 출력 형식으로 파일을 나열합니다. |
| 스캔 소유권 | 소스에 있는 파일 및 디렉토리의 소유권 정보를 검색합니다 있습니다. |
| 스캔 - du | 하위 디렉토리를 포함하여 각 디렉토리의 공간 사용량을 요약합니다. |
| <<smb_scan_fmt,스캔 - FMT(); 표현(); | Python 표현식에 따라 파일 목록을 포맷합니다(참조) `xcp help -fmt` 참조). |
| 스캔 광고 | 전체 SMB 공유를 반복적으로 검색하고 모든 파일과 관련된 대체 데이터 스트림을 나열합니다. |

**scan -h,--help** 를 참조하십시오

를 사용합니다 `-h` 및 `--help` 매개 변수 및 `scan` 명령 - 스캔 명령 사용 방법에 대한 자세한 정보를 표시합니다.

구문

```
xcp scan --help
```

예제 보기

```
C:\netapp\xcp>xcp scan --help

usage: xcp scan [-h] [-v] [-parallel <n>] [-match <filter>] [-exclude
<filter>] [-preserve-atime] [-depth
<n>] [-loglevel <name>] [-stats] [-l] [-ownership] [-du]
                [-fmt <expression>] [-html] [-csv] [-edupe] [-bs <n>]
[-ads]
                source
positional arguments:
   source
optional arguments:
   -h, --help           show this help message and exit
   -v                   increase debug verbosity
   -parallel <n>        number of concurrent processes (default: <cpu-
count>)
   -match <filter>      only process files and directories that match
the filter (see `xcp help -match` for     details)
   -exclude <filter>    Exclude files and directories that match the
filter (see `xcp help -exclude` for details)
   -preserve-atime      restore last accessed date on source
   -depth <n>           limit the search depth
   -loglevel <name>     option to set log level filter (default:INFO)
   -stats               print tree statistics report
   -l                   detailed file listing output
   -ownership           retrieve ownership information
   -du                  summarize space usage of each directory
including subdirectories
   -fmt <expression>    format file listing according to the python
expression (see `xcp help -fmt` for details)
   -html                Save HTML statistics report
   -csv                 Save CSV statistics report
   -edupe               Include dedupe and sparse data estimate in
reports (see documentation for details)
   -bs <n>              read/write block size for scans which read data
with -edupe (default: 64k)
   -ads                 scan NTFS alternate data stream
```

스캔 **- v**

를 사용합니다 –v 매개 변수 scan 오류 또는 경고가 보고될 때 문제를 해결하거나 디버깅하기 위해 자세한 로깅 정보를
제공하는 명령입니다.

**구문**

```
xcp scan -v \\<IP address or hostname of SMB server>\source_share
```

**예제 보기**

```
c:\netapp\xcp>xcp scan -v \\<IP address or hostname of SMB
server>\source_share
xcp scan -v \\<IP address or hostname of SMB server>\source_share
---Truncated output----
source_share\ASUP.pm
source_share\ASUP_REST.pm
source_share\Allflavors_v2.pm
source_share\Armadillo.pm
source_share\AsupExtractor.pm
source_share\BTS_Config.pm
source_share\Backup.pm
source_share\Aggregate.pm
source_share\Burt.pm
source_share\CConfig.pm
source_share\CIFS.pm
source_share\CR.pm
source_share\CRC.pm
source_share\CSHM.pm
source_share\CSM.pm
source_share\agnostic\SFXOD.pm
source_share\agnostic\Snapmirror.pm
source_share\agnostic\VolEfficiency.pm
source_share\agnostic\flatfile.txt
source_share\agnostic
source_share
xcp scan \\<IP address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

**스캔 병렬 <n>**

를 사용합니다 `-parallel <n>` 매개 변수 `scan` XCP 동시 프로세스의 수를 더 높거나 더 적게 설정하는 명령입니다.

ⓘ     n의 최대값은 61입니다.

구문

```
xcp scan -parallel <n> \\<IP address or hostname of SMB
server>\source_share
```

예제 보기

```
c:\netapp\xcp>xcp scan -parallel 8 \\<IP address or hostname of SMB
server>\cifs_share
xcp scan -parallel 8 \\<IP address or hostname of SMB
server>\cifs_share

cifs_share\ASUP.pm
cifs_share\ASUP_REST.pm
cifs_share\Allflavors_v2.pm
cifs_share\Armadillo.pm
cifs_share\AsupExtractor.pm
cifs_share\BTS_Config.pm
cifs_share\Backup.pm
cifs_share\Aggregate.pm
cifs_share\agnostic\CifsAccess.pm
cifs_share\agnostic\DU_Cmode.pm
cifs_share\agnostic\Flexclone.pm
cifs_share\agnostic\HyA_Clone_Utils.pm
cifs_share\agnostic\Fileclone.pm
cifs_share\agnostic\Jobs.pm
cifs_share\agnostic\License.pm
cifs_share\agnostic\Panamax_Clone_Utils.pm
cifs_share\agnostic\LunCmds.pm
cifs_share\agnostic\ProtocolAccess.pm
cifs_share\agnostic\Qtree.pm
cifs_share\agnostic\Quota.pm
cifs_share\agnostic\RbacCmdFetcher.pm
cifs_share\agnostic\RbacCmdFetcher_ReadMe
cifs_share\agnostic\SFXOD.pm
cifs_share\agnostic\Snapmirror.pm
cifs_share\agnostic\VolEfficiency.pm
cifs_share\agnostic\flatfile.txt
cifs_share\agnostic
cifs_share
xcp scan -parallel 8 \\<IP address or hostname of SMB
server>\cifs_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

## 스캔 - 일치 **<filter>**

를 사용합니다 `-match <filter>` 매개 변수 `scan` 필터와 일치하는 파일 및 디렉토리만 처리하는 명령입니다.

```
xcp scan -match <filter> \\<IP address or hostname of SMB
server>\source_share
```

다음 예에서는 `scan -match` 1개월에서 1년 사이에 변경된 모든 파일을 스캔하고 검색된 각 파일에 대해 콘솔에 행을 인쇄합니다. 마지막 수정 시간의 ISO 형식, 사람이 읽을 수 있는 파일 크기, 파일 형식 및 상대 경로가 각 파일에 대해 반환됩니다.

예제 보기

```
c:\netapp\xcp>xcp scan -match "1*month < modified < 1*year" -fmt
"'{:>15} {:>7}{}
{}'.format(iso(mtime), humanize_size(size), type, relpath)" \\<IP
address or hostname of SMB server>\source_share
xcp scan -match "1*month < modified < 1*year" -fmt "'{:>15} {:>7} {}
{}'.format(iso(mtime), humanize_size(size), type, relpath)" \\<IP
address or hostname of SMB server>\source_share

xcp scan -match 1*month < modified < 1*year -fmt '{:>15} {:>7} {}
{}'.format(iso(mtime), humanize_size(size), type, relpath) \\<IP
address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

다음 예에서는 `scan -match` 3개월 이상 수정되지 않은 파일과 크기가 4MB를 초과하는 파일을 나열합니다.

예제 보기

```
c:\netapp\xcp>xcp scan -match "modified > 3*month and size > 4194304"
-fmt "'{},{},
{}'.format(iso(mtime), humanize_size(size), relpath)" \\<IP address or
hostname of SMB
server>\source_share
xcp scan -match "modified > 3*month and size > 4194304" -fmt "'{}, {},
{}'.format(iso(mtime), humanize_size(size), relpath)" \\<IP address or
hostname of SMB server>\source_share

xcp scan -match modified > 3*month and size > 4194304 -fmt '{}, {},
{}'.format(iso(mtime), humanize_size(size), relpath) \\<IP address or
hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

다음 두 예제 중 첫 번째 예제에서는 디렉터리와 일치하며 형식 지정에서는 변수 "mtime", "relative path" 및 "depth"
사이에 쉼표를 추가합니다.

두 번째 예제에서는 동일한 출력을 "name.csv"로 리디렉션합니다.

예제 보기

```
c:\netapp\xcp>xcp scan -match "type is directory" -fmt
"','.join(map(str, [iso(mtime), relpath, depth]))" \\<IP address or
hostname of SMB server>\source_share
xcp scan -match "type is directory" -fmt "','.join(map(str,
[iso(mtime), relpath, depth]))" \\<IP address or hostname of SMB
server>\source_share

2013-03-07_15:41:40.376072,source_share\agnostic,1
2020-03-05_04:15:07.769268,source_share,0

xcp scan -match type is directory -fmt ','.join(map(str, [iso(mtime),
relpath, depth])) \\<IP address or hostname of SMB server>\source_share
317 scanned, 2 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

예제 보기

```
c:\netapp\xcp>xcp scan -match "type is directory" -fmt
"','.join(map(str, [iso(mtime), relpath, depth]))" \\<IP address or
hostname of SMB server>\source_share > name.csv
xcp scan -match "type is directory" -fmt "','.join(map(str,
[iso(mtime), relpath, depth]))" \\<IP address or hostname of SMB
server>\source_share > name.csv
```

다음 예에서는 전체 경로와 RAW를 인쇄합니다 `mtime` 디렉토리가 아닌 모든 파일의 값입니다. 를 클릭합니다 `mtime`
값이 70자로 채워져 읽을 수 있는 콘솔 보고서를 쉽게 만들 수 있습니다.

예제 보기

```
c:\netapp\xcp>xcp scan -match "type is not directory" -fmt
"'{}{:>70}'.format(abspath, mtime)" \\<IP address or hostname of SMB
server>\source_share
xcp scan -match "type is not directory" -fmt "'{}
{:>70}'.format(abspath, mtime)" \\<IP address or hostname of SMB
server>\source_share

--truncated output--
\\<IP address or hostname of SMB server>\source_share\ASUP.pm
1362688899.238098
\\<IP address or hostname of SMB server>\source_share\ASUP_REST.pm
1362688899.264073
\\<IP address or hostname of SMB server>\source_share\Allflavors_v2.pm
1362688899.394938
\\<IP address or hostname of SMB server>\source_share\Armadillo.pm
1362688899.402936
\\<IP address or hostname of SMB server>\source_share\AsupExtractor.pm
1362688899.410922
\\<IP address or hostname of SMB server>\source_share\BTS_Config.pm
1362688899.443902
\\<IP address or hostname of SMB server>\source_share\Backup.pm
1362688899.444905
\\<IP address or hostname of SMB server>\source_share\Aggregate.pm
1362688899.322019
\\<IP address or hostname of SMB server>\source_share\Burt.pm
1362688899.446889
\\<IP address or hostname of SMB server>\source_share\CConfig.pm
1362688899.4479
\\<IP address or hostname of SMB server>\source_share\CIFS.pm
1362688899.562795
\\<IP address or hostname of SMB
server>\source_share\agnostic\ProtocolAccess.pm
1362688900.358093
\\<IP address or hostname of SMB server>\source_share\agnostic\Qtree.pm
1362688900.359095
\\<IP address or hostname of SMB server>\source_share\agnostic\Quota.pm
1362688900.360094
\\<IP address or hostname of SMB
server>\source_share\agnostic\RbacCmdFetcher.pm
1362688900.3611
\\<IP address or hostname of SMB
server>\source_share\agnostic\RbacCmdFetcher_ReadMe
1362688900.362094
```

```
\\<IP address or hostname of SMB server>\source_share\agnostic\SFXOD.pm
1362688900.363094
\\<IP address or hostname of SMB
server>\source_share\agnostic\Snapmirror.pm
1362688900.364092
\\<IP address or hostname of SMB
server>\source_share\agnostic\VolEfficiency.pm
1362688900.375077
\\<IP address or hostname of SMB
server>\source_share\agnostic\flatfile.txt
1362688900.376076

xcp scan -match type is not directory -fmt '{} {:>70}'.format(abspath,
mtime) \\<IP address or hostname of SMB server>\source_share
317 scanned, 315 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

**스캔 - <filter> 제외**

를 사용합니다 `-exclude <filter>` 를 사용하여 `scan` 필터에서 패턴을 기준으로 디렉토리 및 파일을 제외하는 명령입니다.

구문

```
xcp scan -exclude <filter> \\<IP address or hostname of SMB
server>\source_share
```

다음 예에서는 `scan -exclude` 1개월에서 1년 사이에 변경된 파일을 제외하고 제외되지 않은 각 파일에 대해 콘솔에 행을 인쇄합니다. 각 파일에 대해 인쇄된 세부 정보는 최종 수정 시간의 ISO 형식, 사람이 읽을 수 있는 파일 크기, 유형 및 상대 경로입니다.

예제 보기

```
c:\netapp\xcp>xcp scan -exclude "1*month < modified < 1*year" -fmt
"'{:>15} {:>7}{}
{}'.format(iso(mtime), humanize_size(size), type, relpath)" \\<IP
address or hostname ofSMB server>\localtest\arch\win32\agnostic
xcp scan -exclude "1*month < modified < 1*year" -fmt "'{:>15} {:>7}
{}{}'.format(iso(mtime), humanize_size(size), type, relpath)" \\<IP
address or hostname of SMB server>\localtest\arch\win32\agnostic
2013-03-07_15:39:22.852698 46 regular agnostic\P4ENV
2013-03-07_15:40:27.093887 8.40KiB regular agnostic\Client_outage.thpl
2013-03-07_15:40:38.381870 23.0KiB regular
agnostic\IPv6_RA_Configuration_Of_LLA_In_SK_BSD.thpl
2013-03-07_15:40:38.382876 12.0KiB regular
agnostic\IPv6_RA_Default_Route_changes.thpl
2013-03-07_15:40:38.383870 25.8KiB regular
agnostic\IPv6_RA_Port_Role_Change.thpl
2013-03-07_15:40:38.385863 28.6KiB regular
agnostic\IPv6_RA_processing_And_Default_Route_Installation.thpl
2013-03-07_15:40:38.386865 21.8KiB regular
agnostic\IPv6_RA_processing_large_No_Prefix.thpl
2013-03-07_15:40:40.323163            225 regular agnostic\Makefile
2013-03-07_15:40:40.324160          165 regular
agnostic\Makefile.template
----truncated output ----
2013-03-07_15:45:36.668516            0 directory
agnostic\tools\limits_finder\vendor\symfony\src
2013-03-07_15:45:36.668514            0 directory
agnostic\tools\limits_finder\vendor\symfony
2013-03-07_15:45:40.782881            0 directory
agnostic\tools\limits_finder\vendor
2013-03-07_15:45:40.992685            0 directory
agnostic\tools\limits_finder
2013-03-07_15:45:53.242817            0 directory agnostic\tools
2013-03-07_15:46:11.334815            0 directory agnostic

xcp scan -exclude 1*month < modified < 1*year -fmt '{:>15} {:>7} {}
{}'.format(iso(mtime), humanize_size(size), type, relpath) \\<IP
address or hostname of SMB server>\localtest\arch\win32\agnostic
140,856 scanned, 1 excluded, 0 errors
Total Time : 46s
STATUS : PASSED
```

다음 예에서는 `scan -exclude` 3개월 이상 수정되지 않았고 크기가 5.5KB보다 큰 제외 안 된 파일을 나열합니다. 각

파일에 대해 인쇄되는 세부 정보는 최종 수정 시간의 ISO 형식, 사람이 읽을 수 있는 파일 크기, 형식 및 상대
경로입니다.

예제 보기

```
c:\netapp\xcp>xcp scan -exclude "modified > 3*month and size > 5650"
-fmt "'{}, {}, {}'.format(iso(mtime), humanize_size(size), relpath)"
\\<IP address or hostname of SMB
server>\localtest\arch\win32\agnostic\snapmirror
xcp scan -exclude "modified > 3*month and size > 5650" -fmt "'{}, {},
{}'.format(iso(mtime), humanize_size(size) relpath)" \\<IP address or
hostname of SMB server>\localtest\arch\win32\agnostic\snapmirror

2013-03-07_15:44:53.713279, 4.31KiB, snapmirror\rsm_abort.thpl
2013-03-07_15:44:53.714269, 3.80KiB, snapmirror\rsm_break.thpl
2013-03-07_15:44:53.715270, 3.99KiB, snapmirror\rsm_init.thpl
2013-03-07_15:44:53.716268, 2.41KiB, snapmirror\rsm_quiesce.thpl
2013-03-07_15:44:53.717263, 2.70KiB, snapmirror\rsm_release.thpl
2013-03-07_15:44:53.718260, 4.06KiB, snapmirror\rsm_resume.thpl
2013-03-07_15:44:53.720256, 4.77KiB, snapmirror\rsm_resync.thpl
2013-03-07_15:44:53.721258, 3.83KiB, snapmirror\rsm_update.thpl
2013-03-07_15:44:53.724256, 4.74KiB, snapmirror\sm_quiesce.thpl
2013-03-07_15:44:53.725254, 4.03KiB, snapmirror\sm_resync.thpl
2013-03-07_15:44:53.727249, 4.30KiB, snapmirror\sm_store_complete.thpl
2013-03-07_15:44:53.729250, 0, snapmirror

xcp scan -exclude modified > 3*month and size > 5650 -fmt '{}, {},
{}'.format(iso(mtime), humanize_size(size), relpath) \\<IP address or
hostname of SMB server>\localtest\arch\win32\agnostic\snapmirror
18 scanned, 6 excluded, 0 errors Total Time : 0s
STATUS : PASSED
```

다음 예제에서는 디렉터리를 제외합니다. 변수 사이에 쉼표를 추가하는 서식과 함께 제외되지 않은 파일이 나열됩니다
`mtime`, `relpath`, 및 `depth`.

예제 보기

```
c:\netapp\xcp>xcp scan -exclude "type is directory" -fmt
"','".join(map(str, [iso(mtime), relpath, depth]))" \\<IP address or
hostname of SMB server>\localtest\arch\win32\agnostic\snapmirror
xcp scan -exclude "type is directory" -fmt "','".join(map(str,
[iso(mtime), relpath,depth]))"
\\<IP address or hostname of
SMBserver>\localtest\arch\win32\agnostic\snapmirror
2013-03-07_15:44:53.712271,snapmirror\SMutils.pm,1
2013-03-07_15:44:53.713279,snapmirror\rsm_abort.pm,1
2013-03-07_15:44:53.714269,snapmirror\rsm_break.pm,1
2013-03-07_15:44:53.715270,snapmirror\rsm_init.thpl,1
2013-03-07_15:44:53.716268,snapmirror\rsm_quiesce.thpl,1
2013-03-07_15:44:53.717263,snapmirror\rsm_release.thpl,1
2013-03-07_15:44:53.718260,snapmirror\rsm_resume.thpl,1
2013-03-07_15:44:53.720256,snapmirror\rsm_resync.thpl,1
2013-03-07_15:44:53.721258,snapmirror\rsm_update.thpl,1
2013-03-07_15:44:53.722261,snapmirror\sm_init.thpl,1
2013-03-07_15:44:53.723257,snapmirror\sm_init_complete.thpl,1
2013-03-07_15:44:53.724256,snapmirror\sm_quiesce.thpl,1
2013-03-07_15:44:53.725254,snapmirror\sm_resync.thpl,1
2013-03-07_15:44:53.726250,snapmirror\sm_retrieve_complete.thpl,1
2013-03-07_15:44:53.727249,snapmirror\sm_store_complete.thpl,1
2013-03-07_15:44:53.728256,snapmirror\sm_update.thpl,1
2013-03-07_15:44:53.729260,snapmirror\sm_update_start.thpl,1

xcp scan -exclude type is directory -fmt ','.join(map(str, [iso(mtime),
relpath, depth])) \\<IP address or hostname of SMB
server>\localtest\arch\win32\agnostic\snapmirror
18 scanned, 1 excluded, 0 errors
Total Time : 0s
STATUS : PASSED
```

다음 예에서는 전체 파일 경로와 RAW를 인쇄합니다 `mtimevalue` 디렉토리가 아닌 모든 파일 를 클릭합니다
`mtimevalue` 콘솔 보고서를 쉽게 읽을 수 있도록 70자로 패딩됩니다.

예제 보기

```
c:\netapp\xcp>xcp scan -exclude "type is not directory" -fmt "'{}
{:>70}'.format(abspath, mtime)" \\<IP address or hostname of
SMBserver>\source_share

xcp scan -exclude type is not directory -fmt '{}
{:>70}'.format(abspath, mtime) \\<IP address or hostname of SMB
server>\source_share
18 scanned, 17 excluded, 0errors
Total Time : 0s
STATUS : PASSED
```

## 스캔-보존-atime

를 사용합니다 `-preserve-atime` 매개 변수 `scan` 소스에 있는 모든 파일의 마지막 액세스 날짜를 복원하고 를 재설정하는 명령입니다 `atime` XCP가 파일을 읽기 전의 원래 값으로.

SMB 공유를 스캔하면 파일에 대한 액세스 시간이 수정됩니다(스토리지 시스템이 수정하도록 구성된 경우) `atime` XCP가 파일을 하나씩 읽고 있기 때문입니다. XCP는 를 변경하지 않습니다 `atime` `파일을 읽기만 하면 업데이트가 시작됩니다 `atime.

구문

```
xcp scan -preserve-atime \\<IP address or hostname of SMB
server>\source_share
```

예제 보기

```
c:\netapp\xcp>xcp scan -preserve-atime \\<IP address or hostname of SMB
server>\source_share
xcp scan -preserve-atime \\<IP address or hostname of SMB
server>\source_share

source_share\ASUP.pm
source_share\ASUP_REST.pm
source_share\Allflavors_v2.pm
source_share\Armadillo.pm
source_share\AsupExtractor.pm
source_share\BTS_Config.pm
source_share\Backup.pm
source_share\Aggregate.pm
source_share\Burt.pm
source_share\CConfig.pm
source_share\agnostic\ProtocolAccess.pm
source_share\agnostic\Qtree.pm
source_share\agnostic\Quota.pm
source_share\agnostic\RbacCmdFetcher.pm
source_share\agnostic\RbacCmdFetcher_ReadMe
source_share\agnostic\SFXOD.pm
source_share\agnostic\Snapmirror.pm
source_share\agnostic\VolEfficiency.pm
source_share\agnostic\flatfile.txt
source_share\agnostic
source_share

xcp scan -preserve-atime \\<IP address or hostname of
SMBserver>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 1s
STATUS : PASSED
```

## 스캔 깊이 **<n>**

를 사용합니다 `-depth <n>` 매개 변수 `scan` 명령을 사용하여 SMB 공유 내에 있는 디렉터리의 검색 수준을
제한합니다.

> ⓘ    를 클릭합니다 `-depth` 옵션은 XCP가 파일을 하위 디렉토리로 스캔할 수 있는 정도를 지정합니다.

구문

```
xcp scan -depth <2> \\<IP address or hostname of SMB server>\source_share
```

예제 보기

```
c:\netapp\xcp>xcp scan -depth 2 \\<IP address or hostname of SMB
server>\source_share
xcp scan -depth 2 \\<IP address or hostname of SMB server>\source_share

source_share\ASUP.pm
source_share\ASUP_REST.pm
source_share\Allflavors_v2.pm
source_share\Armadillo.pm
source_share\AsupExtractor.pm
source_share\BTS_Config.pm
source_share\Backup.pm
source_share\Aggregate.pm
source_share\Burt.pm
source_share\CConfig.pm
source_share\CIFS.pm
source_share\CR.pm
source_share\CRC.pm
source_share\CSHM.pm
source_share\agnostic\Fileclone.pm
source_share\agnostic\Jobs.pm
source_share\agnostic\License.pm
source_share\agnostic\Panamax_Clone_Utils.pm
source_share\agnostic\LunCmds.pm
source_share\agnostic\ProtocolAccess.pm
source_share\agnostic\Qtree.pm
source_share\agnostic\Quota.pm
source_share\agnostic\RbacCmdFetcher.pm
source_share\agnostic\RbacCmdFetcher_ReadMe
source_share\agnostic\SFXOD.pm
source_share\agnostic\Snapmirror.pm
source_share\agnostic\VolEfficiency.pm
source_share\agnostic\flatfile.txt
source_share\agnostic
source_share

xcp scan -depth 2 \\<IP address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

## 스캔 - 통계

를 사용합니다 `-stats` 매개 변수 `scan` 트리 통계 보고서 형식으로 파일을 나열하는 명령입니다.

구문

```
xcp scan -stats \\<IP address or hostname of SMB server>\source_share
```

```
C:\netapp\xcp>xcp scan -stats \\<IP address or hostname of SMB
server>\cifs_share

== Maximum Values ==
        Size        Depth       Namelen      Dirsize
     88.2MiB           3          108           20

== Average Values ==
        Size        Depth       Namelen      Dirsize
     4.74MiB           2           21            9

== Top File Extensions ==
no extension       .PDF         .exe        .html       .whl       .py
other
    22                2           2           2           2          1
9
   20.0KiB        1.54MiB    88.4MiB      124KiB     1.47MiB   1.62KiB
98.3MiB

== Number of files ==
   empty     <8KiB     8-64KiB    64KiB-1MiB    1-10MiB     10-100MiB
>100MiB
      2         24          2            7          2            3

== Space used ==
   empty     <8KiB     8-64KiB    64KiB-1MiB    1-10MiB     10-100MiB
>100MiB
      0   24.0KiB     124KiB       2.87MiB    2.91MiB       184MiB
0

== Directory entries ==
   empty     1-10      10-100        100-1K     1K-10K         >10K
                 4           1
== Depth ==
    0-5      6-10       11-15        16-20      21-100         >100
     45

== Modified ==
>1 year  9-12 months  6-9 months  3-6 months  1-3 months  1-31 days  1-
24 hrs  <1
hour     <15 mins      future       <1970       invalid
                                                               44
1
                                                           190MiB
```

```
== Created ==
>1 year  9-12 months  6-9 months  3-6 months  1-3 months  1-31 days  1-
24 hrs  <1
hour     <15 mins       future       <1970        invalid
                                                           45
                                                        190MiB

Total count: 45
Directories: 5
Regular files: 40
Symbolic links:
Junctions:
Special files:
Total space for regular files: 190MiB
Total space for directories: 0
Total space used: 190MiB
Dedupe estimate: N/A
Sparse data: N/A
xcp scan -stats \\<IP address or hostname of SMB server>\cifs_share
45 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

**스캔 - HTML**

를 사용합니다 `-html` 매개 변수 `scan` HTML 통계 보고서에 파일을 나열하는 명령입니다.

> ⓘ XCP 보고서(.csv, .html)는 XCP 바이너리와 동일한 위치에 저장됩니다. 파일 이름은 <xcp_process_id>_<time_stamp>.html 형식입니다. XCP는 SID(보안 식별자)를 소유자 이름에 매핑할 수 없는 경우 SID에서 마지막 "–" 뒤에 있는 마지막 몇 자리를 사용하여 소유자를 나타냅니다. 예를 들어, XCP가 SID S-1-5-21-1896871423-3211229150-3383017265-4854184를 소유자에 매핑할 수 없는 경우 4854184를 사용하여 소유자를 나타냅니다.

구문

```
xcp scan -stats -html -preserve-atime -ownership \\<IP address or hostname
of SMB server>\source_share
```

```
Z:\scripts\xcp\windows>xcp scan -stats -html -preserve-atime -ownership
\\<IP address or hostname of SMB server>\source_share
1,972 scanned, 0 matched, 0 errors, 7s
4,768 scanned, 0 matched, 0 errors,12s
7,963 scanned, 0 matched, 0 errors,17s
10,532 scanned, 0 matched, 0 errors,22s
12,866 scanned, 0 matched, 0 errors,27s
15,770 scanned, 0 matched, 0 errors,32s
17,676 scanned, 0 matched, 0 errors,37s


== Maximum Values ==
     Size        Depth      Namelen      Dirsize
   535KiB          16           33           45


== Average Values ==
     Size        Depth      Namelen      Dirsize
  10.3KiB           7           11            6


== Top File SIDs ==
S-1-5-21-1896871423-3211229150-3383017265-4854184 S-1-5-32-544 S-1-5-
21-1896871423-3211229150-3383017265-3403389
     9318        8470             1


== Top Space SIDs ==
S-1-5-21-1896871423-3211229150-3383017265-4854184 S-1-5-32-544 S-1-5-
21-1896871423-3211229150-3383017265-3403389
  76.8MiB    69.8MiB             0


== Top File Extensions ==
      py          .rst         .html  no  extension        .txt
.png        other
    5418         3738         1974             1197          630          336
1344


== Number of files ==
   empty        <8KiB        8-64KiB      64KiB-1MiB   1-10MiB  10-100MiB
>100MiB
     168        11466         2709             294


== Space used ==
   empty        <8KiB        8-64KiB      64KiB-1MiB   1-10MiB  10-100MiB
>100MiB
       0      24.4MiB      55.3MiB          66.9MiB
```

```
== Directory entries ==
    empty       1-10        10-100          100-1K      1K-10K          >10K
       42        2690          420


== Depth ==
       0-5         6-10          11-15               16-20      21-100
>100
      3832        12527          1424                  6


== Modified ==
  >1 year      >1 month      1-31 days      1-24 hrs      <1 hour
<15 mins     future      invalid
    11718        2961                                      3110
== Created ==
  >1 year     >1 month     1-31 days        1-24 hrs    <1 hour     <15
mins       future        invalid
                                              1      17788

== Accessed ==
  >1 year     >1 month     1-31 days        1-24 hrs      <1 hour        <15
mins       future        invalid
                                                         14624

3165


Total count: 17789
Directories: 3152
Regular files: 14637
Symbolic links:
Junctions:
Special files:
Total space for regular files:147MiB
Total space for directories: 0
Total space used: 147MiB
Dedupe estimate: N/A
Sparse data: N/A
xcp scan -stats -html -preserve-atime -ownership \\<IP address or
hostname ofSMB
server>\source_share
17,789 scanned, 0 matched, 0errors
Total Time : 39s
STATUS : PASSED
```

## 스캔 - CSV

를 사용합니다 `-csv` 매개 변수 `scan` CSV 트리 통계 보고서에 파일을 나열하는 명령입니다.

구문

```
xcp scan -stats -csv -preserve-atime -ownership \\<IP address or hostname
of SMB server>\source_share
```

구문

```
Z:\scripts\xcp\windows>xcp scan -stats -csv -preserve-atime -ownership
\\<IP address or hostname of SMB server>\source_share

1,761 scanned, 0 matched, 0 errors, 6s
4,949 scanned, 0 matched, 0 errors,11s
7,500 scanned, 0 matched, 0 errors,16s
10,175 scanned, 0 matched, 0 errors,21s
12,371 scanned, 0 matched, 0 errors,26s
15,330 scanned, 0 matched, 0 errors,31s
17,501 scanned, 0 matched, 0 errors,36s


== Maximum Values ==
    Size         Depth        Namelen       Dirsize
  535KiB            16              33             45


== Average Values ==
    Size         Depth        Namelen        Dirsize
 10.3KiB             7              11              6


== Top File SIDs ==
S-1-5-21-1896871423-3211229150-3383017265-4854184 S-1-5-32-544 S-1-5-
21-1896871423-3211229150- 3383017265-3403389
    9318        8470                1


== Top Space SIDs ==
S-1-5-21-1896871423-3211229150-3383017265-4854184 S-1-5-32-544 S-1-5-
21-1896871423-3211229150- 3383017265-3403389
 76.8MiB      69.8MiB                 0


== Top File Extensions ==
     .py          .rst         .html    no extension       .txt          .png
other
    5418        3738         1974            1197         630          336
1344


==  Number of files ==
    empty        <8KiB       8-64KiB      64KiB-1MiB    1-10MiB    10-100MiB
>100MiB
     168        11466            2709            294


== Space used ==
   empty        <8KiB       8-64KiB      64KiB-1MiB    1-10MiB    10-100MiB
>100MiB
     0        24.4MiB        55.3MiB        66.9MiB            0          0
```

```
0

== Directory entries ==
    empty          1-10        10-100          100-1K      1K-10K         >10K
       42          2690           420


==  Depth ==
     0-5           6-10         11-15           16-20        21-100         >100
     3832          12527         1424              6


==  Modified ==
 >1 year  >1 month    1-31 days     1-24 hrs    <1 hour       <15 mins
future   invalid
      11718        2961                         3110


== Created ==
 >1 year  >1 month    1-31 days     1-24 hrs    <1 hour     <15 mins
future   invalid
                                                17789


== Accessed ==
 >1 year  >1 month    1-31 days     1-24 hrs     <1 hour        <15 mins
future   invalid
                                                15754         2035


Total count: 17789
Directories: 3152
Regular files: 14637 Symbolic links:
Junctions:
Special files:
Total space for regular files: 147MiB Total space for directories: 0
Total space used: 147MiB
Dedupe estimate: N/A Sparse data: N/A
xcp scan -stats -csv -preserve-atime -ownership \\<IP address or
hostname of SMB server>\source_share
17,789 scanned, 0 matched, 0 errors Total Time : 40s
STATUS : PASSED
```

**scan-l(스캔 - l**

를 사용합니다 -l 매개 변수 scan 긴 목록 출력 형식으로 파일을 나열하는 명령입니다.

구문

```
xcp scan -l \\<IP address or hostname of SMB server>\source_share
```

예제 보기

```
c:\netapp\xcp>xcp scan -l \\<IP address or hostname of SMB
server>\source_share xcp scan -l \\<IP address or hostname of SMB
server>\source_share

f   195KiB   7y0d source_share\ASUP.pm
f  34.7KiB   7y0d source_share\ASUP_REST.pm
f  4.11KiB   7y0d source_share\Allflavors_v2.pm
f  38.1KiB   7y0d source_share\Armadillo.pm
f  3.83KiB   7y0d source_share\AsupExtractor.pm
f  70.1KiB   7y0d source_share\BTS_Config.pm
f  2.65KiB   7y0d source_share\Backup.pm
f  60.3KiB   7y0d source_share\Aggregate.pm
f  36.9KiB   7y0d source_share\Burt.pm
f  8.98KiB   7y0d source_share\CConfig.pm
f  19.3KiB   7y0d source_share\CIFS.pm
f  20.7KiB   7y0d source_share\CR.pm
f  2.28KiB   7y0d source_share\CRC.pm
f  18.7KiB   7y0d source_share\CSHM.pm
f  43.0KiB   7y0d source_share\CSM.pm
f  19.7KiB   7y0d source_share\ChangeModel.pm
f  33.3KiB   7y0d source_share\Checker.pm
f  3.47KiB   7y0d source_share\Class.pm
f  37.8KiB   7y0d source_share\Client.pm
f   188KiB   7y0d source_share\agnostic\Flexclone.pm
f  15.9KiB   7y0d source_share\agnostic\HyA_Clone_Utils.pm
f  13.4KiB   7y0d source_share\agnostic\Fileclone.pm
f  41.8KiB   7y0d source_share\agnostic\Jobs.pm
f  24.0KiB   7y0d source_share\agnostic\License.pm
f  34.8KiB   7y0d source_share\agnostic\Panamax_Clone_Utils.pm
f  30.2KiB   7y0d source_share\agnostic\LunCmds.pm
f  40.9KiB   7y0d source_share\agnostic\ProtocolAccess.pm
f  15.7KiB   7y0d source_share\agnostic\Qtree.pm
f  29.3KiB   7y0d source_share\agnostic\Quota.pm
f  13.7KiB   7y0d source_share\agnostic\RbacCmdFetcher.pm
f  5.55KiB   7y0d source_share\agnostic\RbacCmdFetcher_ReadMe
f  3.92KiB   7y0d source_share\agnostic\SFXOD.pm
f  35.8KiB   7y0d source_share\agnostic\Snapmirror.pm
f  40.4KiB   7y0d source_share\agnostic\VolEfficiency.pm
f  6.22KiB   7y0d source_share\agnostic\flatfile.txt
d       0   7y0d source_share\agnostic
d       0 19h17m source_share

xcp scan -l \\<IP address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
```

```
  Total Time : 0s
  STATUS : PASSED
```

**스캔 소유권**

를 사용합니다 `-ownership` 매개 변수 scan 파일에 대한 소유권 정보를 검색하는 명령입니다.

> ⓘ    만 사용할 수 있습니다 `-ownership` 를 사용하여 `-l`, `-match`, `-fmt`, 또는 `-stats` 매개 변수.

**구문**

```
xcp scan -l -ownership \\<IP address or hostname of SMB
server>\source_share
```

```
c:\netapp\xcp>xcp scan -l -ownership \\<IP address or hostname of SMB
server>\source_share xcp scan -l -ownership \\<IP address or hostname
of SMB server>\source_share

f    BUILTIN\Administrators  195KiB  7y0d    source_share\ASUP.pm
f    BUILTIN\Administrators  34.7KiB 7y0d    source_share\ASUP_REST.pm
f    BUILTIN\Administrators  4.11KiB 7y0d
source_share\Allflavors_v2.pm
f    BUILTIN\Administrators  38.1KiB 7y0d    source_share\Armadillo.pm
f    BUILTIN\Administrators  3.83KiB 7y0d
source_share\AsupExtractor.pm
f    BUILTIN\Administrators  70.1KiB 7y0d    source_share\BTS_Config.pm
f    BUILTIN\Administrators  2.65KiB 7y0d    source_share\Backup.pm
f    BUILTIN\Administrators  60.3KiB 7y0d    source_share\Aggregate.pm
f    BUILTIN\Administrators  36.9KiB 7y0d    source_share\Burt.pm
f    BUILTIN\Administrators  8.98KiB 7y0d    source_share\CConfig.pm
f    BUILTIN\Administrators  19.3KiB 7y0d    source_share\CIFS.pm
f    BUILTIN\Administrators  20.7KiB 7y0d    source_share\CR.pm
f    BUILTIN\Administrators  2.28KiB 7y0d    source_share\CRC.pm
f    BUILTIN\Administrators  18.7KiB 7y0d    source_share\CSHM.pm
f    BUILTIN\Administrators  43.0KiB 7y0d    source_share\CSM.pm
f    BUILTIN\Administrators  19.7KiB 7y0d    source_share\ChangeModel.pm
f    BUILTIN\Administrators  33.3KiB 7y0d    source_share\Checker.pm
f    BUILTIN\Administrators  3.47KiB 7y0d    source_share\Class.pm
f    BUILTIN\Administrators  37.8KiB 7y0d    source_share\Client.pm
f    BUILTIN\Administrators  2.44KiB 7y0d    source_share\ClientInfo.pm
f    BUILTIN\Administrators  37.2KiB 7y0d    source_share\ClientMgr.pm
f    BUILTIN\Administrators  17.1KiB 7y0d    source_share\ClientRPC.pm
f    BUILTIN\Administrators  9.21KiB 7y0d
source_share\ClusterAgent.pm
f    BUILTIN\Administrators  15.7KiB 7y0d source_share\agnostic\Qtree.pm
f    BUILTIN\Administrators  29.3KiB 7y0d source_share\agnostic\Quota.pm
f    BUILTIN\Administrators  13.7KiB 7y0d
source_share\agnostic\RbacCmdFetcher.pm
f    BUILTIN\Administrators  5.55KiB 7y0d
source_share\agnostic\RbacCmdFetcher_ReadMe
f    BUILTIN\Administrators  3.92KiB 7y0d source_share\agnostic\SFXOD.pm
f    BUILTIN\Administrators  35.8KiB 7y0d
source_share\agnostic\Snapmirror.pm
f    BUILTIN\Administrators  40.4KiB 7y0d
source_share\agnostic\VolEfficiency.pm
f    BUILTIN\Administrators  6.22KiB 7y0d
source_share\agnostic\flatfile.txt
```

```
d    BUILTIN\Administrators   7y0d source_share\agnostic
d    BUILTIN\Administrators


xcp scan -l -ownership \\<IP address or hostname of SMB
server>\source_share
317 scanned, 0 matched, 0 errors Total Time : 1s
STATUS : PASSED
```

## 스캔 - du

를 사용합니다 `-du` 매개 변수 `scan` 하위 디렉토리를 포함하여 각 디렉토리의 공간 사용량을 요약하는 명령입니다.

### 구문

```
xcp scan -du \\<IP address or hostname of SMB server>\source_share
```

### 예제 보기

```
c:\netapp\xcp>xcp scan -du \\<IP address or hostname of SMB
server>\source_share xcp scan -du \\<IP address or hostname of SMB
server>\source_share

  569KiB source_share\agnostic
  19.8MiB source_share

xcp scan -du \\<IP address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

## 스캔 - FMT <expression>

를 사용합니다 `-fmt <expression>` 매개 변수 `scan` 정의된 식에 따라 파일 목록의 형식을 지정하는 명령입니다.

### 구문

```
xcp scan -fmt "', '.join(map(str, [relpath, name, size, depth]))"
\\<IPaddress or hostname of SMB server>\source_share
```

```
c:\netapp\xcp>xcp scan -fmt "', '.join(map(str, [relpath, name, size,
depth]))"  \\<IP address or hostname of SMB server>\source_share
xcp scan -fmt "', '.join(map(str, [relpath, name, size, depth]))"
\\<IP address or hostname of SMB server>\source_share

source_share\ASUP.pm, ASUP.pm, 199239, 1
source_share\ASUP_REST.pm, ASUP_REST.pm, 35506, 1
source_share\Allflavors_v2.pm, Allflavors_v2.pm, 4204, 1
source_share\Armadillo.pm, Armadillo.pm, 39024, 1
source_share\AsupExtractor.pm, AsupExtractor.pm, 3924, 1
source_share\BTS_Config.pm, BTS_Config.pm, 71777, 1
source_share\Backup.pm, Backup.pm, 2714, 1
source_share\Aggregate.pm, Aggregate.pm, 61699, 1
source_share\Burt.pm, Burt.pm, 37780, 1
source_share\CConfig.pm, CConfig.pm, 9195, 1
source_share\CIFS.pm, CIFS.pm, 19779, 1
source_share\CR.pm, CR.pm, 21215, 1
source_share\CRC.pm, CRC.pm, 2337, 1
source_share\agnostic\LunCmds.pm, LunCmds.pm, 30962, 2
source_share\agnostic\ProtocolAccess.pm, ProtocolAccess.pm, 41868, 2
source_share\agnostic\Qtree.pm, Qtree.pm, 16057,2
source_share\agnostic\Quota.pm, Quota.pm, 30018,2
source_share\agnostic\RbacCmdFetcher.pm, RbacCmdFetcher.pm, 14067, 2
source_share\agnostic\RbacCmdFetcher_ReadMe, RbacCmdFetcher_ReadMe,
5685, 2
source_share\agnostic\SFXOD.pm, SFXOD.pm, 4019, 2
source_share\agnostic\Snapmirror.pm, Snapmirror.pm, 36624, 2
source_share\agnostic\VolEfficiency.pm, VolEfficiency.pm, 41344, 2
source_share\agnostic\flatfile.txt, flatfile.txt, 6366, 2
source_share\agnostic, agnostic, 0, 1
source_share, , 0, 0
xcp scan -fmt ', '.join(map(str, [relpath, name, size, depth])) \\<IP
address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

## 스캔 광고

를 사용합니다 -ads 에 플래그 매개 변수를 추가합니다 scan 명령을 사용하여 전체 SMB 공유를 반복적으로 스캔하고 모든 파일 및 연결된 대체 데이터 스트림을 나열합니다.

## 구문

```
xcp scan -ads \\<source_ip_address>\source_share\src
```

## 예제 보기

```
C:\netapp\xcp>xcp scan -ads \\<source_ip_address>\source_share\src

src\file1.txt:ads1
src\file1.txt:ads_file1.txt_1697037934.4154522.txt
src\file1.txt
src\file2.txt:ads1
src\file2.txt:ads_file2.txt_1697037934.5873265.txt
src\file2.txt
src\test1.txt:ads_test1.txt_1697037934.7435765.txt
src\test1.txt
src\dir1\dfile1.txt:ads1
src\dir1\dfile1.txt:ads_dfile1.txt_1697037934.1185782.txt
src\dir1\dfile1.txt:ads_xcp.exe
src\dir1\dfile1.txt:ads_tar
src\dir1\dfile1.txt:java_exe
src\dir1\dfile1.txt:cmdzip
src\dir1\dfile1.txt:ads1_2GB
src\dir1\dfile1.txt
src\dir1:ads1
src\dir1:ads_dir1_1697038504.087317.txt
src\dir1
src:ads_src_1697038504.7123322.txt
src

xcp scan -ads \\<source_ip_address>\source_share\src
6 scanned, 0 matched, 0 errors, 15 ads scanned
Total Time : 2s
STATUS : PASSED
```

## 복사

를 클릭합니다 `copy` 명령은 전체 소스 디렉토리 구조를 검색하여 대상 SMB 공유로 복사합니다. 를 클릭합니다 `copy` 명령에는 소스 및 대상 경로가 변수로 필요합니다. 스캔되고 복사된 파일, 처리량/속도 및 경과 시간 세부 정보가 5초마다 콘솔에 인쇄됩니다.

> ⓘ
> • 런타임 로그 파일은 "C:\NetApp\xCP" 아래에 저장됩니다.
> • 여기 `copy` 명령은 ACL(액세스 제어 목록) 없이 데이터를 복제합니다.

## 구문

```
xcp copy \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

## 예제 보기

```
c:\netapp\xcp>xcp copy \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp copy \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
317 scanned, 0 matched, 316 copied, 0 errors
Total Time : 2s
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `copy` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| copy -h,--help | 에 대한 자세한 정보를 표시합니다 `copy` 명령. |
| 사본 - v | 디버그 세부 정보 증가 |
| <<smb_copy_parallel,복사-병렬();n | 동시 프로세스의 수를 지정합니다(기본값: <cpu-count>). |
| <<smb_copy_match,복사-일치();필터(); | 필터와 일치하는 파일 및 디렉토리만 처리합니다(참조) `xcp help - match` 참조). |
| <<smb_copy_exclude,복사-제외();필터(); | 필터에서 파일과 디렉터리만 제외합니다 |
| copy-preserve-atime 을 선택합니다 | 소스에서 마지막으로 액세스한 날짜를 복원합니다. |
| Copy-acl 을 선택합니다 | 보안 정보를 복사합니다. |
| <<smb_copy_acl,copy-fallback-user | 로컬(도메인이 아닌) 소스 컴퓨터 사용자의 권한을 받는 대상 컴퓨터의 Active Directory 사용자 또는 로컬 (도메인이 아닌) 사용자를 지정합니다. 예: domain\administrator |
| <<smb_copy_acl,copy-fallback-group | 로컬(도메인이 아닌) 소스 컴퓨터 그룹의 권한을 받는 대상 컴퓨터의 Active Directory 그룹 또는 로컬(도메인이 아닌) 그룹을 지정합니다. 예: domain\administrators |
| Copy-root 를 선택합니다 | 루트 디렉터리의 ACL을 복사합니다. |
| copy-aclverify {yes, no} | Copy-ACL 작업 중에 ACL 확인을 건너뛰거나 포함하는 옵션을 제공합니다. |
| 소유권 복사 | 소유권을 복사하지 않습니다. |
| <<smb_copy_bs,복사 - BS n | 읽기/쓰기 블록 크기(기본값: 1M) |

| 매개 변수 | 설명 |
|---|---|
| 광고 문구 | 소스 SMB 공유에서 대상 SMB 공유로 NTFS 대체 데이터 스트림을 복사합니다. |

**copy -h,--help**

를 사용합니다 `-h` 및 `--help` 매개 변수 및 `copy` 명령을 사용하여 에 대한 자세한 정보를 표시합니다 `copy` 명령

구문

```
xcp copy -help
```

예제 보기

```
C:\netapp\xcp>xcp copy -help

usage: xcp copy [-h] [-v] [-parallel <n>] [-match <filter>] [-exclude
<filter>] [-preserve- atime] [-acl] [-fallback-user FALLBACK_USER]
[-fallback-group FALLBACK_GROUP] [-loglevel <name>] [-root] [-
noownership] [- aclverify {yes,no}] [-bs <n>] [-ads]
          source target

positional arguments:
    source
    target

optional arguments:
-h, --help              show this help message and exit
-v                      increase debug verbosity
-parallel <n>           number of concurrent processes (default: <cpu-
count>)
-match <filter>         only process files and directories that match the
filter (see `xcp help -match` for details)
-exclude <filter>       Exclude files and directories that match the
filter (see `xcp help - exclude` for details)
-preserve-atime         restore last accessed date on source
-acl                    copy security information
-fallback-user FALLBACK_USER
                        the name of the user on the target machine to
receive the permissions of local (non-domain) source machine users (eg.
domain\administrator)
-fallback-group FALLBACK_GROUP
                        the name of the group on the target machine to
receive the permissions of local (non-domain) source machine groups
(eg. domain\administrators)
-loglevel <name>        option to set log level filter (default:INFO)
-root                   copy acl for root directory
-noownership            do not copy ownership
-aclverify {yes,no}     choose whether you need to skip acl verification
-bs <n>                 read/write block size for copy (default: 1M)
-ads                    copy NTFS alternate data streams.
```

사본 **- v**

를 사용합니다 `-v` 매개 변수 `copy` 자세한 디버그 정보를 제공하는 명령입니다.

구문

```
xcp copy -v \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp copy -v \\<IP address of SMB destination server>\src
\\<IP address of SMB destination server>\dest\d1

failed to set attributes for "d1": (5, 'CreateDirectory', 'Access is
denied.')
failed to copy "f1.txt": (5, 'CreateFile', 'Access is denied.')
failed to set attributes for "": (5, 'SetFileAttributesW', 'Access is
denied.') error setting timestamps on "": errno (code: 5) Access is
denied.
H:\p 4\xcp_latest\xcp_cifs\xcp\ main .py copy -v \\<IP address of SMB
destination server>\src \\<IP address of SMB destination
server>\dest\d1
3 scanned, 0 matched, 0 skipped, 1 copied, 0 (0/s), 3 errors
Total Time : 3s
STATUS : FAILED
```

복사 - 병렬 **<n>**

를 사용합니다 `-parallel <n>` 매개 변수 `copy` XCP 동시 프로세스의 수를 더 높거나 더 적게 설정하는 명령입니다.
의 기본값입니다 `-parallel` CPU 수와 같습니다.

ⓘ     n의 최대값은 61입니다.

구문

```
xcp copy -parallel <n> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp copy -parallel 7   \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp copy -parallel 7 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
317 scanned, 0 matched, 316 copied, 0errors
Total Time : 2s
STATUS : PASSED
```

**<filter>를 복사합니다**

를 사용합니다 `-match <filter>` 매개 변수 `copy` 전달된 인수와 일치하는 데이터만 복사하는 명령입니다.

구문

```
xcp copy -match <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp copy -match "'gx' in name" \\<IP address or hostname
of SMB server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp copy -match 'gx' in name \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
317 scanned, 5 matched, 4 copied, 0 errors
Total Time : 1s
STATUS : PASSED
```

**Copy - <filter>를 제외합니다**

를 사용합니다 `-exclude <filter>` 매개 변수 `copy` 제외된 데이터만 복사하는 명령입니다.

```
xcp copy -exclude <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

다음 예에서는 이름에 "resync" 문자열이 있는 파일 및 디렉터리가 복사에 대해 제외되었습니다.

예제 보기

```
c:\netapp\xcp>xcp copy -exclude "'resync' in name" \\<IP address or
hostname of SMB server>\source_share \\<IP address or hostname of SMB
server>\dest_share


xcp copy -exclude 'resync' in name \\<IP address or hostname of SMB
server>\source_share \\\\<IP address or hostname of SMB
server>\dest_share
18 scanned, 2 excluded, 0 skipped, 15 copied, 122KiB (50.5KiB/s), 0
errors
Total Time : 2s
STATUS : PASSED
```

**copy-preserve-atime 을 선택합니다**

를 사용합니다 `-preserve-atime` 매개 변수 `copy` XCP가 파일을 읽기 전에 "atime"을 원래 값으로 재설정하는 명령입니다.

구문

```
xcp copy -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp copy -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp copy -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
317 scanned, 0 matched, 316 copied, 0 errors
Total Time : 2s
STATUS : PASSED
```

**copy-acl-fallback-user <fallback_user>-fallback-group <fallback_group>입니다**

를 사용합니다 `-acl` 매개 변수 `copy` ACL(보안 설명자)의 전송을 활성화하는 명령입니다.

를 사용합니다 `-acl` 매개 변수 `-fallback-user` 및 `-fallback-group` 로컬(도메인이 아닌) 소스 컴퓨터 사용자 또는 그룹의 권한을 받기 위해 대상 컴퓨터 또는 Active Directory에서 사용자 및 그룹을 지정하는 옵션입니다. Active Directory의 일치하지 않는 사용자를 참조하지 않습니다.

구문

```
xcp copy -acl -fallback-user <fallback_user> -fallback-group
<fallback_group> \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

**copy-aclverify {yes, no}**

를 사용합니다 `-aclverify {yes,no}` 매개 변수 `copy` ACL 복사 작업 중에 ACL 확인을 건너뛰거나 포함하는 옵션을 제공하는 명령입니다.

를 사용해야 합니다 `-aclverify {yes,no}` 매개 변수 `copy -acl` 명령. 기본적으로 ACL 복사 작업은 ACL을 확인합니다. 를 설정하는 경우 `-aclverify` 옵션을 로 설정합니다 `no`, ACL 확인 및 를 건너뛸 수 있습니다 `fallback-user` 및 `fallback-group` 옵션이 필요하지 않습니다. 를 설정합니다 `-aclverify` 를 선택합니다 `yes`, 이 필요합니다 `fallback-user` 및 `fallback-group` 옵션을 선택합니다.

구문

```
xcp copy -acl -aclverify yes -fallback-user <fallback_user> -fallback
-group <fallback_group> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
C:\NetApp\xcp>xcp copy -acl -aclverify yes -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group"
\\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share

12 scanned, 0 matched, 0 skipped, 0 copied, 0 (0/s), 0 errors, 5s, 0
acls copied
12 scanned, 0 matched, 0 skipped, 0 copied, 0 (0/s), 0 errors, 10s, 0
acls copied
12 scanned, 0 matched, 0 skipped, 0 copied, 0 (0/s), 0 errors, 15s, 0
acls copied xcp copy -acl -aclverify yes -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" \\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share
12 scanned, 0 matched, 0 skipped, 11 copied, 10KiB (634/s), 0 errors,
11 acls copied
Total Time : 16s
STATUS : PASSED

C:\NetApp\xcp>xcp copy -acl -aclverify no
\\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share

xcp copy -acl -aclverify no \\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share
12 scanned, 0 matched, 0 skipped, 11 copied, 10KiB (5.61KiB/s), 0
errors, 11 acls copied
Total Time : 1s
STATUS : PASSED
```

**Copy-root** 를 선택합니다

를 사용합니다 `-root` 매개 변수 `copy` 루트 디렉토리의 ACL을 복사하는 명령입니다.

구문

```
xcp copy -acl -root -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
C:\NetApp\XCP>xcp copy -acl -root -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp copy -acl -root -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
6 scanned, 0 matched, 0 skipped, 5 copied, 200 (108/s), 0 errors, 6
acls copied
Total Time : 1s
STATUS : PASSED
```

## 소유권 복사

를 사용합니다 -noownership 매개 변수 copy 소스에서 대상으로 소유권을 복사하지 않도록 지정하는 명령입니다.
를 사용해야 합니다 -noownership 를 사용하여 -acl 옵션 및 필요 fallback-user 및 fallback-group 필수
매개 변수로

구문

```
xcp.exe copy -acl -noownership -fallback-user <fallback_user> -fallback
-group <fallback_group> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
C:\Netapp\xcp>xcp.exe copy -acl -noownership -fallback-user
"DOMAIN\User" -fallback-group "DOMAIN\Group"
\\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share

568 scanned, 0 matched, 0 skipped, 0 copied, 0 (0/s), 0 errors, 5s, 0
acls copied
568 scanned, 0 matched, 0 skipped, 0 copied, 0 (0/s), 0 errors, 10s, 0
acls copied
568 scanned, 0 matched, 0 skipped, 135 copied, 4.26MiB (872KiB/s), 0
errors, 15s, 137 acls copied xcp.exe copy -acl -noownership -fallback
-user "DOMAIN\User" -fallback-group "DOMAIN\Group"
\\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share
568 scanned, 0 matched, 0 skipped, 567 copied, 17.7MiB (1.01MiB/s), 0
errors, 567 acls copied
Total Time : 17s
STATUS : PASSED
```

## 복사 - BS <n>

를 사용합니다 `-bs <n>` 매개 변수 `copy` 명령을 사용하여 읽기/쓰기 블록 크기를 제공합니다. 기본값은 1M입니다.

구문

```
xcp.exe copy -bs <n> \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\Netapp\xcp>xcp.exe copy -bs 32k \\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share

xcp.exe copy -bs 32k \\<source_IP_address>\source_share
\\<destination_IP_address>\dest_share
568 scanned, 0 matched, 0 skipped, 567 copied, 17.7MiB (6.75MiB/s), 0
errors
Total Time : 2s
STATUS : PASSED
```

## 광고 문구

를 사용합니다 `-ads` 매개 변수 `copy` 소스 SMB 공유에서 대상 SMB 공유로 NTFS 대체 데이터 스트림을 복사하는 명령입니다.

## 구문

```
xcp copy -ads \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

## 예제 보기

```
c:\netapp\xcp>xcp copy -ads \\<source_IP_address>\source_share\src
\\<dest_IP_address>\dest_share

6   scanned, 0 matched, 0 skipped, 3 copied, 13 (2.41/s), 0 errors, 5s,
10 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 10s, 11 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 15s, 12 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 20s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 25s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 30s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 35s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 40s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 45s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 2m15s, 13 ads copied
6   scanned,   0   matched,   0   skipped,   3   copied, 13 (0/s),
0   errors, 3m5s, 13 ads copied
xcp copy -ads \\<source_IP_address>\source_share\src
\\<desination_IP_address>\dest_share
6 scanned, 0 matched, 0 skipped, 5 copied, 26 (0.137/s), 0 errors, 14
ads copied
Total Time : 3m9s
STATUS : PASSED
```

# 동기화

를 클릭합니다 `sync` 명령은 소스 및 타겟 공유의 변경 및 수정 사항을 병렬로 검색하고 타겟에 적절한 작업을 적용하여 타겟이 소스와 동일한지 확인합니다. 를 클릭합니다 `sync` 명령은 데이터 콘텐츠, 타임스탬프, 파일 속성, 소유권 및 보안 정보를 비교합니다.

## 구문

```
xcp sync \\<source SMB share> \\<IP address of SMB destination server>
```

## 예제 보기

```
c:\netapp\xcp>xcp sync \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
xcp sync \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `sync` 매개 변수 및 설명

| 매개 변수 | 설명 |
| --- | --- |
| sync -h, — 도움말 | 이 도움말 메시지를 표시하고 종료합니다. |
| 동기화 - v | 디버그 세부 정보 증가 |
| <<smb_sync_parallel,동기화 - 병렬();n | 동시 프로세스 수(기본값: <cpu-count>). |
| <<smb_sync_match,동기화 일치();필터(); | 필터와 일치하는 파일 및 디렉토리만 처리합니다(참조) `xcp help - match` 참조). |
| <<smb_sync_exclude,동기화 - 제외(); 필터(); | 필터에서 파일 및 디렉터리만 제외합니다. |
| sync-preserve-atime을 선택합니다 | 소스에서 마지막으로 액세스한 날짜를 복원합니다. |
| 동기화 - noatime | 파일 액세스 시간을 확인하지 마십시오. |
| 동기화 - noctime | 파일 생성 시간을 확인하지 마십시오. |
| 동기화 - nomtime | 파일 수정 시간을 확인하지 마십시오. (이 옵션은 더 이상 사용되지 않습니다. 이 옵션 없이 동기화가 계속 실행됩니다.) |
| sync-noattrs를 선택합니다 | 특성을 검사하지 마십시오. |
| 동기화 - 소유권 없음 | 소유권을 확인하지 마십시오. |

| 매개 변수 | 설명 |
|---|---|
| <<sync_smb_atime,동기화 - 타임윈도(), 부동(), | 허용 가능한 액세스 시간 차이(초). |
| <<sync_smb_ctime,동기화 - ctimewindow(); 부동(); | 허용 가능한 생성 시간 차이(초). |
| <<sync_smb_mtime,동기화 - mtimewindow(); 부동(); | 허용되는 수정 시간 차이(초) |
| SYNC-ACL을 선택합니다 | 보안 정보를 복사합니다. |
| <<sync_smb_acl,sync-fallback-user | 로컬(도메인이 아닌) 소스 컴퓨터 사용자(예: domain\administrator)의 권한을 받기 위해 대상 컴퓨터의 Active Directory 사용자 또는 로컬(도메인이 아닌) 사용자입니다. |
| <<sync_smb_acl,sync-fallback-group | 로컬(도메인이 아닌) 소스 컴퓨터 그룹(예: domain\administrators)의 권한을 받기 위한 대상 컴퓨터의 Active Directory 그룹 또는 로컬(도메인이 아닌) 그룹입니다. |
| 동기화 -I | 출력 세부 사항을 높입니다. |
| 동기화 루트 | 루트 디렉토리에 대한 ACL을 동기화합니다. |
| 동기화 - 전용 | 보안 정보만 복사합니다. |
| sync-aclverify {yes, no} | ACL 동기화 작업 중에 ACL 확인을 포함하거나 건너뛸 수 있는 옵션을 제공합니다. |
| <<smb_sync_bs,동기화 - BS | 읽기/쓰기 블록 크기(기본값: 1M). |
| 동기화 광고 | 를 사용합니다 sync 명령과 함께 -ads 소스 및 타겟 SMB 공유에서 대체 데이터 스트림의 변경 및 수정 사항을 검색하는 플래그입니다. 변경 사항이 있는 경우 변경 내용이 대상에 적용됩니다 타겟이 소스와 동일한지 확인합니다. |

**sync -h, —** 도움말

를 사용합니다 `-h` 및 `--help` 매개 변수 및 `sync` 명령을 사용하여 에 대한 자세한 정보를 표시합니다 `sync` 명령

구문

```
xcp sync --help
```

```
C:\Netapp\xcp>xcp sync --help
usage: xcp sync [-h] [-v] [-parallel <n>] [-match <filter>] [-exclude
<filter>] [-preserve-atime] [-noatime] [-noctime] [-nomtime] [-noattrs]
[-atimewindow <float>]
[-ctimewindow <float>] [-mtimewindow <float>] [-acl] [-fallback-user
FALLBACK_USER] [-fallback-group FALLBACK_GROUP] [-loglevel <name>] [-l]
[-root]
[-noownership] [-onlyacl] [-aclverify {yes,no}] [-bs <n>] [-ads] source
target

Note: ONTAP does not let a SMB client modify COMPRESSED or ENCRYPTED
attributes. XCP sync will ignore these file attributes.

positional arguments:
    source
    target

optional arguments:
    -h, --help              show this help message and exit
    -v                      increase debug verbosity
    -parallel <n>           number of concurrent processes (default:
<cpu-count>)
    -match <filter>         only process files and directories that
match the filter (see `xcp help -match` for details)
    -exclude <filter>       Exclude files and directories that match the
filter (see `xcp help -exclude` for details)
    -preserve-atime         restore last accessed date on source
    -noatime                do not check file access time
    -noctime                do not check file creation time
    -nomtime                do not check file modification time
    -noattrs                do not check attributes
    -atimewindow <float>    acceptable access time difference in seconds
    -ctimewindow <float>    acceptable creation time difference in
seconds
    -mtimewindow <float>    acceptable modification time difference in
seconds
    -acl                    copy security information
    -fallback-user FALLBACK_USER
                            the name of the user on the target machine
to receive the permissions of local (non-domain) source machine users
(eg. domain\administrator)
    -fallback-group FALLBACK_GROUP
                            the name of the group on the target machine
to receive the permissions of local (non-domain) source machine groups
```

```
   (eg. domain\administrators)
    -loglevel <name>          option to set log levelfilter
    -l                        increase output detail
    -root                     sync acl for root directory
    -noownership              do not sync ownership
    -onlyacl                  sync only acls
    -aclverify {yes,no}       choose whether you need to skip acl
verification
    -bs <n>                   read/write block size for sync (default: 1M)
    -ads                      sync ntfs alternate data stream
```

**동기화 - v**

를 사용합니다 `-v` 매개 변수 `sync` 자세한 디버그 정보를 제공하는 명령입니다.

구문

```
xcp sync -v \\<IP address or hostname of SMB
server>\vol_SMB_source_xxxxxx\warning \\<IP address of SMB destination
server>\vol_SMB_target_xxxxxx
```

## 예제 보기

```
C:\XCP>xcp sync -v \\<IP address or hostname of SMB
server>\vol_SMB_source_xxxxxx\warning \\<IP address of SMB destination
server>\vol_SMB_target_xxxxxx
ERROR failed to remove from target
"assembly\GAC_32\Microsoft.CertificateServices.PKIClient.Cmdlets\v4.0_6
.3.0.0 31bf3856ad364e35\p ki.psd1": [Errno 13] Access is denied:
'\\\\?\\UNC\\<IP address of SMB destination server>\\vol_SMB_tar
shil\\assembly\\GAC_32\\Microsoft.CertificateServices.PKIClient.Cmdlets
\\v4.0_6.3.0.0 31bf3856ad 364e35\\pki.psd1'
ERROR failed to remove from target
"assembly\GAC_64\Microsoft.GroupPolicy.AdmTmplEditor\v4.0_6.3.0.0
31bf3856ad364e35\Microsoft.Gro upPolicy.AdmTmplEditor.dll": [Errno 13]
Access is denied: '\\\\?\\UNC\\10.61.
\vol_SMB_target_xxxxxx\\assembly\\GAC_64\\Microsoft.GroupPolicy.AdmTmpl
Editor\\v4.0_6.3.0.0 31bf
3856ad364e35\\Microsoft.GroupPolicy.AdmTmplEditor.dll'
1,933 scanned, 1,361 compared, 2 errors, 0 skipped, 0 copied, 1,120
removed, 5s ERROR failed to remove from target
"assembly\GAC_64\System.Printing\v4.0_4.0.0.0
31bf3856ad364e35\System.Printing.dll": [Errno 13] Access is denied:
'\\\\?\\UNC\\<IP address of SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\
4\\System.Printing\\v4.0_4.0.0.0 31bf3856ad364e35\\System.Printing.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\Microsoft.PowerShell.Workflow.ServiceCore\v4.0_3.0.0
.0 31bf3856ad364e35\Micro soft.PowerShell.Workflow.ServiceCore.dll":
[Errno 13] Access is denied: '\\\\
\\<IP address of SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\\GAC_MSIL\\Microsoft.PowerShel
l.Workflow.ServiceCore\\v4
.0_3.0.0.0
31bf3856ad364e35\\Microsoft.PowerShell.Workflow.ServiceCore.dll' ERROR
failed to remove from target
"assembly\GAC_MSIL\Microsoft.RightsManagementServices.ServerManager.Dep
loymentPlugin\v4.0_6.3.0.0
31bf3856ad364e35\Microsoft.RightsManagementServices.ServerManager.Deplo
ymen n.dll": [Errno 13] Access is denied: '\\\\?\\UNC\\<IP address of
SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\\GAC_MSIL\\Microsoft.RightsMan
agementServices.ServerMana ger.DeploymentPlugin\\v4.0_6.3.0.0
31bf3856ad364e35\\Mic
.RightsManagementServices.ServerManager.DeploymentPlugin.dll'
ERROR failed to remove from target
```

```
"assembly\GAC_MSIL\Microsoft.WSMan.Management\v4.0_3.0.0.0
31bf3856ad364e35\Microsoft.WSMan.Mana gement.dll": [Errno 13] Access is
denied: '\\\\?\\UNC\\<IP address of SMB destination server>\\vol_SMB_
_xxxxxx\\assembly\\GAC_MSIL\\Microsoft.WSMan.Management\\v4.0_3.0.0.0
31bf3856ad364e35\\Microsof t.WSMan.Management.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\PresentationUI\v4.0_4.0.0.0
31bf3856ad364e35\PresentationUI.dll": [Errno 13] Access is denied:
'\\\\?\\UNC\\<IP address of SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\
SIL\\PresentationUI\\v4.0_4.0.0.0 31bf3856ad364e35\\PresentationUI.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\System.IO.Compression.FileSystem\v4.0_4.0.0.0
b77a5c561934e089\System.IO.Comp ression.FileSystem.dll": [Errno 13]
Access is denied: '\\\\?\\UNC\\10.61.71.5
_SMB_target_xxxxxx\\assembly\\GAC_MSIL\\System.IO.Compression.FileSyste
m\\v4.0_4.0.0.0 b77a5c561
934e089\\System.IO.Compression.FileSystem.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\System.IdentityModel.Selectors\v4.0_4.0.0.0
b77a5c561934e089\System.IdentityM odel.Selectors.dll": [Errno 13]
Access is denied: '\\\\?\\UNC\\<IP address of SMB destination
server>\\v
s_target_xxxxxx\\assembly\\GAC_MSIL\\System.IdentityModel.Selectors\\v4
.0_4.0.0.0 b77a5c561934e0 89\\System.IdentityModel.Selectors.dll'
2,747 scanned, 2,675 compared, 9 errors, 0 skipped, 0 copied, 2,624
removed, 10s ERROR failed to remove from target
"assembly\GAC_MSIL\System.Web.DataVisualization\v4.0_4.0.0.0
31bf3856ad364e35\System.Web.DataVis ualization.dll": [Errno 13] Access
is denied: '\\\\?\\UNC\\<IP address of SMB destination server>\\vol_c
rget_xxxxxx\\assembly\\GAC_MSIL\\System.Web.DataVisualization\\v4.0_4.0
.0.0 31bf3856ad364e35\\Sy stem.Web.DataVisualization.dll'
cp sync -v \\<IP address or hostname of SMB
server>\vol_SMB_source_xxxxxx\warning \\<IP address of SMB destination
server>\vol_SMB_target_xxxxxx
2,831 scanned, 0 copied, 2,831 compared, 0 removed, 10 errors Total
Time : 10s
STATUS : PASSED
```

**동기화 - 병렬 <n>**

를 사용합니다 `-parallel <n>` 매개 변수 `sync` XCP 동시 프로세스의 수를 더 높거나 더 적게 설정하는 명령입니다.
를 클릭합니다 `sync -parallel <n>` 명령은 동시 프로세스의 수와 동기화됩니다(기본값: <cpu-count>).

ⓘ    n의 최대값은 61입니다.

구문

```
xcp sync -parallel <n>> \\<IP address or hostname of SMB
server>\volxcp\\<IP address of SMB destination server>\xcp1_test1
```

예제 보기

```
C:\xcp>xcp sync -parallel 5 \\<IP address or hostname of SMB
server>\volxcp\\<IP address of SMB destination server>\xcp1_test1
658 scanned, 244 compared, 0 errors, 0 skipped, 0 copied, 0 removed, 5s
658 scanned, 606 compared, 0 errors, 0 skipped, 0 copied, 0 removed,
10s
658 scanned, 658 compared, 0 errors, 0 skipped, 0 copied, 0 removed,
10s
Sending statistics...
```

**Sync-Match(동기화 일치 <filter>)**

를 사용합니다 `-match <filter>` 매개 변수 sync 소스 및 타겟 트리를 검색하고 필터 인수와 일치하는 파일이나 디렉토리만 비교하는 명령입니다. 차이가 있는 경우 명령은 타겟에 필요한 작업을 적용하여 동기화되도록 합니다.

구문

```
xcp sync -match <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -match "'gx' in name" \\<IP address or hostname
of SMB server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -match "'gx' in name" \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -match 'gx' in name \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
634 scanned, 0 copied, 10 compared, 0 removed, 0 errors
Total Time : 2s
STATUS : PASSED
```

**SYNC - <filter> 제외**

를 사용합니다 `-exclude <filter>` 매개 변수 `sync` 필터에서 파일 및 디렉터리만 제외하는 명령입니다.

구문

```
xcp sync -exclude <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
C:\netapp\xcp>xcp sync -exclude "path('*Exceptions*')" \\<IP address or
hostname of SMB server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -exclude path('*Exceptions*') \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
451 scanned, 427 excluded, 0 copied, 24 compared, 0 skipped, 0 removed,
0 errors
Total Time : 2s
STATUS : PASSED
```

**sync-preserve-atime을 선택합니다**

를 사용합니다 `-preserve-atime` 매개 변수 `sync` XCP가 파일을 읽기 전에 "atime"을 원래 값으로 재설정하는 명령입니다.

구문

```
xcp sync -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 4s
STATUS : PASSED
```

**동기화 - noatime**

를 사용합니다 `-noatime` 매개 변수 `sync` 액세스 시간에만 차이가 있는 파일을 제외하고 소스의 모든 차이를 타겟에 동기화하는 명령입니다.

구문

```
xcp sync -noatime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -noatime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -noatime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp sync -noatime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

**동기화 - noctime**

를 사용합니다 `-noctime` 매개 변수 `sync` 생성 시간에만 차이가 있는 파일을 제외하고 소스의 모든 차이를 타겟에 동기화하는 명령입니다.

구문

```
xcp sync -noctime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -noctime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -noctime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp sync -noctime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

**동기화 - nomtime**

를 사용합니다 `-nomtime` 매개 변수 `sync` 수정 시간에만 차이가 있는 파일을 제외하고 소스의 모든 차이를 타겟에 동기화하는 명령입니다. (이 옵션은 더 이상 사용되지 않습니다. 를 클릭합니다 `sync` 명령은 이 옵션 없이 계속 실행됩니다.)

구문

```
xcp sync -nomtime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -nomtime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -nomtime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp sync -nomtime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

**sync-noattrs**를 선택합니다

를 사용합니다 `-noattrs` 매개 변수 `sync` 파일 특성의 차이만 있는 파일을 제외하고 소스의 모든 차이를 타겟에 동기화하는 명령입니다. XCP는 컨텐츠가 다른 경우에만 파일을 복사합니다(ACL이 전송됨).

구문

```
xcp sync -noattrs \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -noattrs  \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -noattrs    \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -noattrs \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

동기화 **-** 소유권 없음

를 사용합니다 `-noownership` 매개 변수 `sync` 소유권에 차이가 있는 파일만 제외하고 소스의 모든 차이를 타겟에 동기화하는 명령입니다.

## 구문

```
xcp sync -noownership \\<IP address or hostname of SMB
server>\vol_SMB_source_xxxxxx \\<IP address of SMB destination
server>\vol_SMB_target_xxxxxx
```

## 예제 보기

```
>xcp sync -acl -noownership -fallback-user "DOMAIN\User" -fallback
-group "DOMAIN\Group" \\<source_IP_address>\source_share \\<IP address
of SMB destination server>\dest_share

      Truncated Output
302,909 scanned,    301,365 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 9m46s
307,632 scanned,    303,530 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 9m51s
308,434 scanned,    305,462 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 9m56s
310,824 scanned,    307,328 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m1s
313,238 scanned,    310,083 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m6s
314,867 scanned,    313,407 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m11s
318,277 scanned,    315,856 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m17s
321,005 scanned,    318,384 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m22s
322,189 scanned,    321,863 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m27s
323,906 scanned,    323,906 compared,   0   errors, 0   skipped,    0
copied, 0   removed, 10m29s

xcp sync -acl -noownership -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<source_IP_address>\source_share \\<IP address of SMB
destination server>\dest_share
323,906 scanned, 0 copied, 323,906 compared, 0 removed, 0 errors
Total Time : 10m29s
STATUS : PASSED
```

## 동기화 방지 **\<float\>**

를 사용합니다 `-atimewindow <float>` 매개 변수 sync 소스에서 목적지까지의 파일 시간에 대해 허용되는 차이

(초)를 지정하는 명령입니다. atime의 차이가 <value>보다 작으면 XCP는 파일을 다른 것으로 보고하지 않습니다.

구문

```
xcp sync -atimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

다음 예제에서 xCP는 소스 파일과 대상 파일 간의 atime 차이를 최대 10분 이내로 받아들이고 타겟의 atime을
업데이트하지 않습니다.

예제 보기

```
c:\netapp\xcp>xcp sync -atimewindow 600 \\<IP address or hostname of
SMB server>\source_share \\<IP address of SMB destination
server>\source_share
xcp sync -atimewindow 600 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\source_share

xcp sync -atimewindow 600 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\source_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

**sync-ctimewindow <float>** 를 참조하십시오

를 사용합니다 `-ctimewindow <float>` 매개 변수 `sync` 소스에서 목적지까지의 파일 ctime에 대해 허용되는 차이
(초)를 지정하는 명령입니다. xCP는 ctime의 차이가 <value>보다 작으면 파일을 다른 것으로 보고하지 않습니다.

구문

```
xcp sync -ctimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

다음 예제에서 xCP는 소스 파일과 대상 파일 간의 atime 차이를 최대 10분 동안 수락하고 타겟의 ctime을 업데이트하지
않습니다.

예제 보기

```
c:\netapp\xcp>xcp sync -ctimewindow 600 \\<IP address or hostname of
SMB server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -ctimewindow 600 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -ctimewindow 600 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

**동기화 - mtimewindow <float>**

를 사용합니다 `-mtimewindow <float>` 매개 변수 `sync` 소스에서 목적지까지의 파일에 대한 mtime에 대한 허용
가능한 차이를 초 단위로 지정하는 명령입니다. mtime 차이가 <value>보다 작은 경우 XCP는 파일을 다른 것으로
보고하지 않습니다.

구문

```
xcp sync -mtimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -mtimewindow 600 \\<IP address or hostname of
SMB server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -mtimewindow 600 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -mtimewindow 600 \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors Total Time :
3s
STATUS : PASSED
```

**sync-acl-fallback-user <fallback_user>-fallback-group <fallback_group>입니다**

를 사용합니다 `-acl`, `-fallback-user` 및 `-fallback-group` 매개 변수 및 sync 소스의 데이터와 보안 정보를
타겟과 비교하고 타겟에 필요한 작업을 적용하는 명령입니다. 를 클릭합니다 `-fallback-user` 및 `-fallback`
`-group` 옵션은 로컬(도메인이 아닌) 원본 사용자 또는 그룹의 권한을 받는 대상 컴퓨터 또는 Active Directory의
사용자 또는 그룹입니다.

> ⓘ  를 사용할 수 없습니다 `-acl` 를 사용하지 않는 옵션 `-fallback-user` 및 `-fallback-group`
> 옵션.

구문

```
xcp sync -acl -fallback-user <fallback_user> -fallback-group
<fallback_group> \\<IP address or hostname of SMB
server>\performance_SMB_home_dirs \\<IP address of SMB destination
server>\performance_SMB_home_dirs
```

**예제 보기**

```
C:\xcp>xcp sync -acl -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
10,796   scanned,    4,002   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    s
15,796   scanned,    8,038   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    0s
15,796   scanned,    8,505   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    5s
15,796   scanned,    8,707   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    0s
15,796   scanned,    8,730   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    5s
15,796   scanned,    8,749   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    0s
15,796   scanned,    8,765   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    5s
15,796   scanned,    8,786   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    0s
15,796   scanned,    8,956   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    5s
15,796   scanned,    9,320   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    0s
15,796   scanned,    9,339   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    5s
15,796   scanned,    9,363   compared,   0   errors, 0   skipped,     0
copied, 0   removed,    m0s
15,796   scanned,    10,019  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m5s
15,796   scanned,    10,042  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m10s
15,796   scanned,    10,059  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m15s
15,796   scanned,    10,075  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m20s
15,796   scanned,    10,091  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m25s
15,796   scanned,    10,108  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m30s
15,796   scanned,    10,929  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m35s
15,796   scanned,    12,443  compared,   0   errors, 0   skipped,     0
copied  0   removed,    1m40s
```

```
15,796  scanned,    13,963  compared,   0   errors, 0    skipped,    0
copied  0   removed,    1m45s
15,796  scanned,    15,488  compared,   0   errors, 0    skipped,    0
copied  0   removed,    1m50s
15,796  scanned,    15,796  compared,   0   errors, 0    skipped,     0
copied  0   removed,    1m51s

xcp sync -acl -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
15,796 scanned, 0 copied, 15,796 compared, 0 removed, 0 errors
Total Time : 1m51
STATUS : PASSED
```

## 동기화 **-l**

를 사용합니다 `-l` 매개 변수 `sync` target에서 XCP가 수행한 모든 동작에 대한 자세한 로깅 정보를 표준 출력으로 제공하는 명령어이다.

구문

```
xcp sync -l \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp sync -l \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -l \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share

File "atime" changed, timestamps set for "agnostic"
File "atime" changed, timestamps set for "<root>"
xcp sync -l \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
634 scanned, 0 copied, 634 compared, 0 removed, 0 errors
Total Time : 3s
STATUS : PASSED
```

## 동기화 루트

를 사용합니다 `-root` 매개 변수 `sync` 루트 디렉터리의 ACL을 동기화하는 명령입니다.

구문

```
xcp sync -acl -root -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
C:\NetApp\XCP>xcp sync -acl -root -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -acl -root -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
12 scanned, 0 copied, 12 compared, 0 skipped, 0 removed, 0 errors, 1
acls copied
Total Time : 2s
STATUS : PASSED
```

**sync-onlyacl-fallback-user &lt;fallback_user&gt;-fallback-group &lt;fallback_group&gt;**의 약어입니다

를 사용합니다 `-onlyacl`, `-fallback-user`, 및 `-fallback-group` 매개 변수 및 `sync` 소스와 대상 간의 보안 정보를 비교하고 대상에 필요한 작업을 적용하는 명령입니다. 를 클릭합니다 `-fallback-user` 및 `-fallback -group` 로컬(도메인이 아닌) 원본 사용자 또는 그룹의 권한을 받는 대상 컴퓨터 또는 Active Directory의 사용자 또는 그룹입니다.

> ⓘ 를 사용할 수 없습니다 `-onlyacl` 를 사용하지 않는 매개 변수입니다 `-fallback-user` 및 `-fallback-group` 옵션.

구문

```
xcp sync -onlyacl -fallback-user <fallback_user> -fallback-group
<fallback_group> \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

**예제 보기**

```
C:\Users\ctladmin\Desktop>xcp sync -onlyacl -fallback-user
"DOMAIN\User" -fallback-group "DOMAIN\Group"
\\<source_IP_address>\source_share \\<IP address of SMB destination
server>\dest_share

8,814 scanned,  0   copied, 620 compared,   0   skipped,    0
removed,    0    errors, 6s
9,294 scanned,  0   copied, 2,064   compared,   0   skipped,    0
removed,    0    errors, 11s
12,614 scanned, 0   copied, 3,729   compared,   0   skipped,    0
removed,    0    errors, 16s
13,034 scanned, 0   copied, 5,136   compared,   0   skipped,    0
removed,    0    errors, 21s
14,282 scanned, 0   copied, 7,241   compared,   0   skipped,    0
removed,    0    errors, 26s
14,282 scanned, 0   copied, 8,101   compared,   0   skipped,    0
removed,    0    errors, 31s
14,282 scanned, 0   copied, 8,801   compared,   0   skipped,    0
removed,    0    errors, 36s
14,282 scanned, 0   copied, 9,681   compared,   0   skipped,    0
removed,    0    errors, 41s
14,282 scanned, 0   copied, 10,405  compared,   0   skipped,    0
removed,    0    errors, 46s
14,282 scanned, 0   copied, 11,431  compared,   0   skipped,    0
removed,    0    errors, 51s
14,282 scanned, 0   copied, 12,471  compared,   0   skipped,    0
removed,    0    errors, 56s
14,282 scanned, 0   copied, 13,495  compared,   0   skipped,    0
removed,    0    errors, 1m1s
14,282 scanned, 0   copied, 14,282  compared,   0   skipped,    0
removed,    0    errors, 1m6s

xcp sync -onlyacl -preserve-atime -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" \\<source_IP_address>\source_share \\<IP
address of SMB destination server>\dest_share
14,282 scanned, 0 copied, 14,282 compared, 0 skipped, 0 removed, 0
errors
Total Time : 1m7s
STATUS : PASSED
```

**sync-aclverify {yes, no}**

를 사용합니다 `-aclverify{yes,no}` 매개 변수 sync ACL sync 작업 중 ACL 검증을 포함하거나 건너뛸 수 있는 옵션을 제공하는 명령입니다. 이 옵션은 에서만 사용할 수 있습니다 `sync -acl` 및 `sync -onlyacl` 명령. ACL 동기화는 기본적으로 ACL 확인을 수행합니다. 를 설정하는 경우 `-aclverify` 옵션을 로 설정합니다 `no`, ACL 확인 및 를 건너뛸 수 있습니다 `fallback-user` 및 `fallback-group` 옵션이 필요하지 않습니다. 를 설정합니다 `-aclverify` 를 선택합니다 `yes`, 이 필요합니다 `fallback-user` 및 `fallback-group` 옵션을 선택합니다.

구문

```
xcp sync -acl -aclverify yes -fallback-user <fallback_user> -fallback
-group <fallback_group> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

```
C:\NetApp\xcp>xcp sync -acl -aclverify yes -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" \\<source_IP_address>\source_share \\<IP
address of SMB destination server>\dest_share

25 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 5s,
0 acls copied
25 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 10s,
0 acls copied
25 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 15s,
0 acls copied xcp sync -acl -aclverify yes -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" \\<source_IP_address>\source_share \\<IP
address of SMB destination server>\dest_share
25 scanned, 1 copied, 25 compared, 0 skipped, 0 removed, 0 errors, 12
acls copied Total Time : 16s
STATUS : PASSED
C:\NetApp\xcp>xcp sync -acl -aclverify no
\\<source_IP_address>\source_share \\<IP address of SMB destination
server>\dest_share

xcp sync -acl -aclverify no \\<source_IP_address>\source_share \\<IP
address of SMB destination server>\dest_share
27 scanned, 1 copied, 27 compared, 0 skipped, 0 removed, 0 errors, 13
acls copied Total Time : 2s
STATUS : PASSED
C:\NetApp\xcp>xcp sync -onlyacl -aclverify yes -fallback-user
"DOMAIN\User" -fallback-group "DOMAIN\Group"
\\<source_IP_address>\source_share \\<IP address of SMB destination
server>\dest_share
24 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 5s,
0 acls copied
24 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 10s,
0 acls copied
24 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 15s,
0 acls copied xcp sync -onlyacl -aclverify yes -fallback-user
"DOMAIN\User" -fallback-group "DOMAIN\Group"
\\<source_IP_address>\source_share \\<IP address of SMB destination
server>\dest_share
C:\NetApp\xcp>xcp sync -onlyacl -aclverify no
\\<source_IP_address>\source_share \\<IP address of SMB destination
server>\dest_share
xcp sync -onlyacl -aclverify no \\<source_IP_address>\source_share
\\<IP address of SMB destination server>\dest_share
24 scanned, 0 copied, 24 compared, 0 skipped, 0 removed, 0 errors, 11
acls copied
```

```
   Total Time : 2s
   STATUS : PASSED
```

## 동기화 - BS <n>

를 사용합니다 `-bs <n>` 매개 변수 `sync` 명령을 사용하여 읽기/쓰기 블록 크기를 제공합니다. 기본 크기는 1M입니다.

구문

```
xcp.exe sync -bs <n> \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
C:\Netapp\xcp>xcp.exe sync -bs 64k \\<source_IP_address>\source_share
\\<IP address of SMB destination server>\dest_share
1,136 scanned, 0 copied, 1,135 compared, 0 skipped, 95 removed, 0
errors, 5s
xcp.exe sync -bs 64k \\<source_IP_address>\source_share \\<IP address
of SMB destination server>\dest_share 1,136 scanned, 283 copied, 1,136
compared, 0 skipped, 283 removed, 0 errors
Total Time : 10s
STATUS : PASSED
```

## 동기화 광고

사용 `-ads` 매개 변수 `sync` 소스 및 타겟 SMB 공유에서 대체 데이터 스트림의 변경 및 수정 사항을 검색하는 명령입니다. 변경 사항이 있는 경우 타겟이 소스와 동일한지 확인하기 위해 변경 사항을 타겟에 적용합니다.

구문

```
xcp sync -ads \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

```
C:\netapp\xcp>xcp sync -ads \\<source_IP_address>\source_share\src
\\<dest_IP_address>\dest_share

13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 5s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 10s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 15s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 20s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 25s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 30s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 1m0s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 2m50s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 2m55s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 3m0s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 3m55s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 4m0s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 4m55s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 5m0s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 5m5s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 5m10s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 5m55s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 6m0s, 1 ads copied
13  scanned,    1   copied, 12  compared,   0    skipped,     0
removed,    0   errors, 6m5s, 1 ads copied
xcp sync -ads \\<source_IP_address>\source_share\src
\\<dest_IP_addess>\dest_share
```

```
13 scanned, 1 copied, 13 compared, 0 skipped, 0 removed, 0 errors, 1
ads copied
Total Time : 6m9s
STATUS : PASSED
```

## 확인합니다

를 클릭합니다 `verify` 명령어는 소스 및 타겟 공유를 읽고 비교하며 다른 사항에 대한 정보를
제공합니다. 를 사용할 수 있습니다 `verify` 복사 또는 동기화 작업을 수행하는 데 사용된
도구에 관계없이 모든 소스 및 대상에 대한 명령

구문

```
xcp verify \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify  \\<IP address of SMB source
server>\source_share  \\<IP address of SMB destination
server>\dest_share
xcp verify  \\<IP address of SMB source server>\source_share  \\ <IP
address of SMB destination server>\dest_share

xcp verify  \\<IP address of SMB source server>\source_share  \\<IP
address of SMB destination server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
xcp verify  \\<IP address of SMB source server>\source_share  \\<IP
address of SMB destination server>\dest_share
Total Time : 3s
STATUS : PASSED
```

다음 표에는 가 나열되어 있습니다 `verify` 매개 변수 및 설명

| 매개 변수 | 설명 |
|---|---|
| verify -h,--help 를 참조하십시오 | 이 도움말 메시지를 표시하고 종료합니다. |
| 검증 - v | 디버그 세부 정보 증가 |
| <<smb_verify_parallel,확인-병렬();n | 동시 프로세스 수(기본값: <cpu-count>). |
| <<smb_verify_match,확인-일치();필터(); | 필터와 일치하는 파일 및 디렉토리만 처리합니다(참조 `xcp help - match` 참조). |
| <<smb_verify_exclude,확인-제외();필터(); | 필터에서 파일 및 디렉터리만 제외합니다. |

| 매개 변수 | 설명 |
|---|---|
| verify-preserve-atime 을 참조하십시오 | 소스에서 마지막으로 액세스한 날짜를 복원합니다. |
| Verify-NoData(확인 - 데이터 없음 | 데이터를 확인하지 마십시오. |
| [확인-atime] | 파일 액세스 시간을 확인합니다. |
| noctime을 확인합니다 | 파일 생성 시간을 확인하지 마십시오. |
| Verify-nomtime(확인 - 명시 | 파일 수정 시간을 확인하지 마십시오. |
| verify-noattrs 를 참조하십시오 | 특성을 검사하지 마십시오. |
| 소유권 확인 | 소유권을 확인하지 마십시오. |
| 확인 광고 | 소스 및 타겟 SMB 공유에서 대체 데이터 스트림의 변경 및 수정 사항을 검색합니다. 변경 사항이 있는 경우 변경 내용이 대상에 적용됩니다<br>타겟이 소스와 동일한지 확인합니다. |
| 확인 - noacls | ACL을 확인하지 마십시오. |
| <<verify_smb_atime,확인 - atimewindow(); 부동(); | 허용 가능한 액세스 시간 차이(초). |
| <<verify_smb_ctime,확인-ctimewindow | 허용 가능한 생성 시간 차이(초). |
| <<verify_smb_mtime,확인-mtimewindow | 허용되는 수정 시간 차이(초) |
| verify-stats 를 참조하십시오 | 소스 및 대상 트리를 병렬로 스캔하고 트리 통계를 비교합니다. |
| verify -I(확인 - I | 출력 세부 사항을 높입니다. |
| verify -II(확인 | 출력 세부 사항(git diff 형식)을 높입니다. |
| <<verify_smb_acl,verify-fallback-user | 로컬(도메인이 아닌) 소스 컴퓨터 사용자(예: domain\administrator)의 권한을 받기 위해 대상 컴퓨터의 Active Directory 사용자 또는 로컬(도메인이 아닌) 사용자입니다. |
| <<verify_smb_acl,verify-fallback-group | 로컬(도메인이 아닌) 소스 컴퓨터 그룹(예: domain\administrators)의 권한을 받기 위한 대상 컴퓨터의 Active Directory 그룹 또는 로컬(도메인이 아닌) 그룹입니다. |
| verify-root 를 선택합니다 | 루트 디렉토리에 대한 ACL을 동기화합니다. |
| 확인 - Only | 보안 정보만 복사합니다. |

**verify -h,--help** 를 참조하십시오

를 사용합니다 `-h` 및 `--help` 매개 변수 및 `verify` 명령을 사용하여 에 대한 자세한 정보를 표시합니다 `verify` 명령

구문

```
xcp verify –help
```

```
C:\Netapp\xcp>xcp verify -help
usage: xcp verify [-h] [-v] [-parallel <n>] [-match <filter>] [-exclude
<filter>][-preserve-atime]
[-loglevel <name>] [-fallback-user FALLBACK_USER]
[-fallback-group FALLBACK_GROUP] [-noacls] [-nodata] [-stats] [-l] [-
root] [-noownership] [-onlyacl] [-noctime] [-nomtime] [-noattrs] [-
atime]
[-atimewindow <float>] [-ctimewindow <float>] [-mtimewindow <float>] [-
ads] source target

Note: ONTAP does not let a SMB client modify COMPRESSED or ENCRYPTED
attributes. XCP sync will ignore these file attributes.

positional arguments:
    source
    target

optional arguments:
-h, --help              show this help message and exit
-v                      increase debug verbosity
-parallel <n>           number of concurrent processes (default: <cpu-
count>)
-match <filter>         only process files and directories that match
the filter (see `xcp help -match` for details)
-exclude <filter>       Exclude files and directories that match the
filter (see `xcp help -exclude` for details)
-preserve-atime         restore last accessed date on source
--help-diag             Show all options including diag.The diag options
should be used only on recommendation by NetApp support.
-loglevel <name>        option to set log level filter (default:INFO)
-fallback-user FALLBACK_USER
                        a user on the target machine to translate the
permissions of local (non-domain) source machine users (eg.
domain\administrator)
-fallback-group FALLBACK_GROUP
                        a group on the target machine to translate the
permissions of local (non- domain) source machine groups (eg.
domain\administrators)
-nodata                 do not check data
-stats                  scan source and target trees in parallel and
compare tree statistics
-l                      detailed file listing output
-root                   verify acl for root directory
-noacls                 do not check acls
```

```
-noownership              do not check ownership
-onlyacl                   verify only acls
-noctime                  do not check file creation time
-nomtime                  do not check file modification time
-noattrs                  do not check attributes
-atime                verify acess time as well
-atimewindow <float>   acceptable access time difference in seconds
-ctimewindow <float>   acceptable creation time difference in seconds
-mtimewindow <float>   acceptable modification time difference in
seconds
-ads                      verify ntfs alternate data stream
```

## 검증 **- v**

를 사용합니다 `-v` 매개 변수 `verify` 자세한 디버그 정보를 제공하는 명령입니다.

구문

```
xcp verify -v \\<IP address of SMB source server>\source_share address of
SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp> xcp verify -v \\<IP address of SMB source
server>\source_share address of SMB destination server>\dest_share
xcp verify -v  \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share

xcp verify -v \\< IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

## **Verify -** 병렬 **<n>**

를 사용합니다 `-parallel <n>` 매개 변수 `verify` XCP 동시 프로세스의 수를 더 높거나 더 적게 설정하는
명령입니다. 를 클릭합니다 `verify -parallel <n>` 명령은 동시 프로세스의 수를 확인합니다(기본값: <cpu-
count>).

ⓘ  | n의 최대값은 61입니다.

구문

```
xcp verify -v -parallel <n> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -v -parallel 8 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -v -parallel 8 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -v -parallel 8 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 4s
STATUS : PASSED
```

**Verify - <filter>를 일치시킵니다**

를 사용합니다 `-match <filter>` 매개 변수 `verify` 소스 및 타겟 트리를 검색하고 필터 인수와 일치하는 파일이나 디렉토리만 비교하는 명령입니다. 차이가 있는 경우 명령은 타겟에 필요한 작업을 적용하여 동기화되도록 합니다.

구문

```
xcp verify -v -match <filter> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -v -match "'Microsoft' in name" \\<IP address
of SMB source server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -v -match "'Microsoft' in name" \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -v -match 'Microsoft' in name \\<IP address of SMB source
server> \source_share \\<IP address of SMB destination
server>\dest_share
374 scanned, 0 compared, 0 same, 0 different, 0 missing, 0 errors
Total Time : 1s
STATUS : PASSED
```

## 확인 - **<filter>** 제외

를 사용합니다 `-exclude <filter>` 매개 변수 `verify` 필터에서 파일 및 디렉터리만 제외하는 명령입니다.

구문

```
xcp verify -exclude <filter> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
C:\netapp\xcp>xcp verify -exclude "path('*Exceptions*')" \\<IP address
of SMB sourceserver>\source_share \\<IP address of SMB destination
server>\dest_share

210 scanned, 99 excluded, 6 compared, 5 same, 1 different, 0 missing, 0
errors, 5s
210 scanned, 107 excluded, 13 compared, 12 same, 1 different, 0
missing, 0 errors, 10s
210 scanned, 107 excluded, 13 compared, 12 same, 1 different, 0
missing, 0 errors, 15s
210 scanned, 107 excluded, 13 compared, 12 same, 1 different, 0
missing, 0 errors, 20s
335 scanned, 253 excluded, 13 compared, 12 same, 1 different, 0
missing, 0 errors, 25s
445 scanned, 427 excluded, 15 compared, 14 same, 1 different, 0
missing, 0 errors, 30s
445 scanned, 427 excluded, 15 compared, 14 same, 1 different, 0
missing, 0 errors, 35s
445 scanned, 427 excluded, 15 compared, 14 same, 1 different, 0
missing, 0 errors, 40s
445 scanned, 427 excluded, 15 compared, 14 same, 1 different, 0
missing, 0 errors, 45s
445 scanned, 427 excluded, 16 compared, 15 same, 1 different, 0
missing, 0 errors, 50s
xcp verify -exclude path('*Exceptions*') \\<IP address of SMB
sourceserver>\source_share \\<IP address of SMB destination
server>\dest_share
445 scanned, 427 excluded, 17 compared, 17 same, 0 different, 0
missing, 0 errors
Total Time : 1m11s
STATUS : PASSED
```

**verify-preserve-atime** 을 참조하십시오

를 사용합니다 `-preserve-atime` 매개 변수 `verify` 재설정하는 명령입니다 `atime` XCP가 파일을 읽기 전의 원래
값으로.

구문

```
xcp verify -preserve-atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -preserve-atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -preserve-atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

374 scanned, 179 compared, 179 same, 0 different, 0 missing, 0 errors,
5s
xcp verify -preserve-atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 8s
STATUS : PASSED
```

**Verify-NoData(확인 - 데이터 없음**

를 사용합니다 `-nodata` 매개 변수 `verify` 데이터를 비교하지 않는 명령입니다.

구문

```
xcp verify -nodata \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -nodata \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -nodata \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp verify -nodata \\<IP address of SMB source server> \source_share
\\<IP address of SMB destination server>\dest_share : PASSED
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

## 확인**-atime**

를 사용합니다 `-atime` 매개 변수 `verify` 소스에서 대상으로 파일 액세스 타임 스탬프를 비교하는 명령입니다.

구문

```
xcp verify -ll -atime \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\Netapp\xcp> xcp verify -ll -atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

WARNING: your license will expire in less than one week! You can renew
your license at https://xcp.netapp.com
dir1: Changed (atime)
  atime
    - 2023-04-14 10:28:47 (1681482527.564423)
    + 2023-04-14 10:24:40 (1681482280.366317)
dir2: Changed (atime)
  atime
    - 2023-04-14 10:28:47 (1681482527.564424)
    + 2023-04-14 10:24:40 (1681482280.366318)
<root>: Changed (atime)
  atime
    - 2023-04-14 10:28:47 (1681482527.054403)
    + 2023-04-14 10:28:35 (1681482515.538801)
xcp verify -ll -atime \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share
14 scanned, 13 compared, 10 same, 3 different, 0 missing, 0 errors
Total Time : 1s
STATUS : FAILED
```

## **noctime**을 확인합니다

를 사용합니다 `-noctime` 매개 변수 `verify` 소스에서 대상으로 파일 생성 타임 스탬프를 비교하지 않는 명령입니다.

구문

```
xcp verify -noctime \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -noctime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -noctime \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp verify -noctime \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share : PASSED
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

**Verify-nomtime(확인 - 명시**

를 사용합니다 `-nomtime` 매개 변수 `verify` 소스에서 대상으로 파일 수정 타임 스탬프를 비교하지 않는 명령입니다.

구문

```
xcp verify -nomtime \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -nomtime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -nomtime \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp verify -nomtime \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share : PASSED
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

**verify-noattrs 를 참조하십시오**

를 사용합니다 `-noattrs` 매개 변수 `verify` 속성을 검사하지 않는 명령입니다.

## 구문

```
xcp verify -noattrs \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

## 예제 보기

```
c:\netapp\xcp>xcp verify -noattrs \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -noattrs \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp verify -noattrs \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share : PASSED
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

## 소유권 확인

를 사용합니다 `-noownership` 매개 변수 `verify` 소유권을 확인하지 않는 명령입니다.

## 구문

```
xcp verify -noownership \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -noownership \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -noownership \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -noownership \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share : PASSED
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

확인 광고

사용 `-ads` 매개 변수 `verify` 소스와 대상에 대체 데이터 스트림이 있는지 확인하고 차이점을 표시하는 명령입니다.

구문

```
xcp verify -ads \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

```
c:\netapp\xcp>xcp verify -ads \\<source_IP_address>\source_share\src
\\<dest_IP_address>\dest_share

7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 5s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 10s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 1m0s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 1m55s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 2m0s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 2m5s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 2m55s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 3m0s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 3m5s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 3m55s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 4m55s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 5m0s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 5m5s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 5m55s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 6m0s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 6m5s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 6m10s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 7m0s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 7m5s
7   scanned,   5   compared,   5   same,   0   different,  0
missing,   0   errors, 7m55s
```

```
7  scanned,   5  compared,   5   same,   0   different,  0
missing,   0   errors, 8m0s

xcp verify -ads \\source_Ip_address>\source_share\src
\\<dest_IP_address>\dest_share
7 scanned, 6 compared, 6 same, 0 different, 0 missing, 0 errors
Total Time : 8m4s
STATUS : PASSED
```

### 확인 **- noacls**

를 사용합니다 `-noacls` 매개 변수 `verify` ACL을 확인하지 않는 명령입니다.

구문

```
xcp verify -noacls -noownership \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -noacls -noownership \\<IP address or hostname
of SMB server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -noacls -noownership \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -noacls -noownership \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
318 scanned, 317 compared, 317 same, 0 different, 0 missing, 0 errors
Total Time : 1s
STATUS : PASSED
```

### **noacls -noownership**을 확인합니다

를 사용합니다 `-noownership` 매개 변수가 포함된 경우 `verify -noacls` 소스에서 대상으로 ACL 또는 소유권을
확인하지 않습니다.

구문

```
xcp verify -noacls -noownership <source> <target>
```

## Verify-atimewindow <float>(확인-알림)

를 사용합니다 `-atimewindow <float>` 매개 변수 `verify` 명령을 사용하여 에 대해 허용 가능한 차이를 초 단위로 지정합니다 atime 소스에서 목적지까지의 파일. XCP는 에서 차이가 있을 경우 파일을 다른 것으로 보고하지 않습니다 atime <value>보다 작습니다. 를 클릭합니다 `verify - atimewindow` 명령은 에서만 사용할 수 있습니다 `-atime` 깃발.

구문

```
xcp verify -atimewindow <float> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\Netapp\xcp> xcp verify -atimewindow 600 -atime \\<IP address of SMB
source server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -atimewindow 600 -atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

14 scanned, 13 compared, 13 same, 0 different, 0 missing, 0 errors
```

## verify-ctimewindow <float> 를 참조하십시오

를 사용합니다 `-ctimewindow <float>` 매개 변수 `verify` 명령을 사용하여 에 대해 허용 가능한 차이를 초 단위로 지정합니다 ctime 소스에서 목적지까지의 파일. XCP는 의 차이가 있을 때 파일을 다른 것으로 보고하지 않습니다 ctime <value>보다 작습니다.

구문

```
xcp verify -ctimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -ctimewindow 600 \\<IP address of SMB
sourceserver>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -ctimewindow 600 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -ctimewindow 600 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

**verify-mtimewindow(확인-mtimewindow <float>**

를 사용합니다 `-mtimewindow <float>` 매개 변수 `verify` 명령을 사용하여 에 대해 허용 가능한 차이를 초 단위로
지정합니다 `mtime` 소스에서 목적지까지의 파일. XCP는 의 차이가 있을 때 파일을 다른 것으로 보고하지 않습니다
`mtime` <value>보다 작습니다.

구문

```
xcp verify -mtimewindow <float> \\<IP address of SMB
sourceserver>\source_share \\<IP address of SMB destination
server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -mtimewindow 600 \\<IP address of SMB
sourceserver>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -mtimewindow 600 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -mtimewindow 600 \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

**verify-stats** 를 참조하십시오

를 사용합니다 `-stats` 매개 변수 `verify` 소스와 대상을 스캔하고 두 공유 간의 유사점이나 차이점을 보여 주는 트리 통계 보고서를 출력하는 명령입니다.

구문

```
xcp verify -stats \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -stats \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -stats \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share


      == Number of files ==
                empty     <8KiB     8-64KiB     64KiB-1MiB   1-10MiB   10-
100MiB   >100MiB
                                    81          170          62          2
on-target                          same        same         same        same
on-source                          same        same         same        same


      == Directory entries ==
                empty     1-10      10-100          100-1K     1K-10K
>10K
                                                    1          1
on-target                                           same       same
on-source                               same        same


      == Depth ==
                0-5       6-10      11-15           16-20      21-100
>100
                317
on-target       same
on-source       same


      == Modified ==
                >1 year   >1 month  1-31 days    1-24 hrs    <1 hour
<15 mins     future    invalid
                315                                          2
on-target       same                                        same
on-source       same                                        same

Total count: 317 / same / same
Directories: 2 / same / same
Regular files: 315 / same / same
Symbolic links:
Junctions:
Special files:
xcp verify -stats \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
635 scanned, 0 errors Total Time : 1s
STATUS : PASSED
```

**verify -I(확인 - I**

를 사용합니다 `-l` 매개 변수 `verify` 명령을 사용하여 소스 및 대상에 있는 파일과 디렉토리 간의 차이점을 나열합니다.

구문

```
xcp verify -l \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

다음 예에서는 복사하는 동안 소유권 정보가 전송되지 않았으며 명령 출력의 차이점을 볼 수 있습니다.

예제 보기

```
c:\netapp\xcp>xcp verify -l \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -l \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share

xcp verify -l \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

**verify -II(확인**

를 사용합니다 `-ll` 매개 변수 `verify` 소스 및 타겟과 파일 또는 디렉토리의 자세한 차이점을 나열하는 명령입니다. 형식은 git diff와 같습니다. 빨간색 값은 소스의 이전 값이고 녹색 값은 타겟의 새 값입니다.

구문

```
xcp verify -ll \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
c:\netapp\xcp>xcp verify -ll \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -ll \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share

xcp verify -ll \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

**verify-fallback-user <fallback_user>-fallback-group <fallback_group>입니다**

를 사용합니다 `-fallback-user` 및 `-fallback-group` 매개 변수 및 `verify` 소스와 대상에서 파일과 디렉토리 간의 ACL 및 소유권 차이를 나열하는 명령입니다.

ⓘ 를 사용하는 경우 `fallback-user` 및 `fallback-group` 복사 또는 동기화 작업의 경우 NetApp는 도 사용할 것을 권장합니다 `fallback-user` 및 `fallback-group` Verify 작업이 있는 매개 변수입니다.

구문

```
xcp verify -fallback-user <fallback_user> -fallback-group <fallback_group>
\\<IP address of SMB source server>\source_share \\<IP address of SMB
destination server>\dest_share
```

**verify-notorigrity-fallback-user <fallback_user>-fallback-group <fallback_group> 를 참조하십시오**

를 사용합니다 `-noownership`, `-fallback-user`, 및 `-fallback-group` 매개 변수 및 `verify` ACL 차이를 나열하고 소스와 대상에서 파일과 디렉토리 간의 소유권 확인을 건너뛰는 명령입니다.

구문

```
xcp verify -noownership -fallback-user <fallback_user> -fallback-group
<fallback_group> \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

**verify-noacls-fallback-user <fallback_user>-fallback-group <fallback_group> 를 참조하십시오**

를 사용합니다 `-noacls`, `-fallback-user`, 및 `-fallback-group` 매개 변수 및 `verify` ACL의 확인을 건너뛰고 소스와 대상에서 파일과 디렉토리 간의 소유권을 확인하는 명령입니다.

```
xcp verify -noacls -fallback-user <fallback_user> -fallback-group
<fallback_group> \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

**verify-root 를 선택합니다**

를 사용합니다 `-root` 매개 변수 `verify` 루트 디렉터리의 ACL을 동기화하는 명령입니다.

구문

```
xcp verify -root -fallback-user <fallback_user> -fallback- group
<fallback_group> \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

예제 보기

```
C:\NetApp\XCP>xcp verify -root -fallback-user "DOMAIN\User" -fallback
-group "DOMAIN\Group" \\<IP address of SMB source server>\source_share
\\<IP address of SMB destination server>\dest_share

xcp verify -l -root -fallback-user "DOMAIN\User" -fallback-group
"DOMAIN\Group" \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
7 scanned, 6 compared, 6 same, 0 different, 0 missing, 0 errors
Total Time : 1s
STATUS : PASSED
```

**verify-onlyacl-fallback-user <fallback_user>-fallback-group <fallback_group> 를 참조하십시오**

를 사용합니다 `-onlyacl`, `-fallback-user` 및 `-fallback-group` 매개 변수 및 `verify` 소스와 대상 간의 보안
정보만 비교하는 명령입니다.

구문

```
xcp verify -onlyacl -preserve-atime -fallback-user <fallback_user>
-fallback- group <fallback_group> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

```
C:\Users\ctladmin\Desktop>xcp verify -onlyacl -preserve-atime -fallback
-user "DOMAIN\User" -fallback- group "DOMAIN\Group" -ll
\\<source_IP_address>\source_share \\<IP address of SMB destination
server>\dest_share

4,722   scanned,     0 compared, 0 same, 0 different, 0 missing, 0
errors, 5s
7,142   scanned,     120 compared, 120 same, 0 different, 0 missing, 0
errors, 10s
7,142   scanned,     856 compared, 856 same, 0 different, 0 missing, 0
errors, 15s
7,142   scanned,     1,374 compared, 1,374 same, 0 different, 0 missing,
0 errors,   20s
7,142   scanned,     2,168 compared, 2,168 same, 0 different, 0 missing,
0 errors,   25s
7,142   scanned,     2,910 compared, 2,910 same, 0 different, 0 missing,
0 errors,   30s
7,142   scanned,     3,629 compared, 3,629 same, 0 different, 0 missing,
0 errors,   35s
7,142   scanned,     4,190 compared, 4,190 same, 0 different, 0 missing,
0 errors,   40s
7,142   scanned,     4,842 compared, 4,842 same, 0 different, 0 missing,
0 errors,   45s
7,142   scanned,     5,622 compared, 5,622 same, 0 different, 0 missing,
0 errors,   50s
7,142   scanned,     6,402 compared, 6,402 same, 0 different, 0 missing,
0 errors,   55s
7,142   scanned,     7,019 compared, 7,019 same, 0 different, 0 missing,
0 errors,   1m0s

xcp verify -onlyacl -preserve-atime -fallback-user "DOMAIN\User"
-fallback-group "DOMAIN\Group" -ll \\<source_IP_address>\source_share
\\<IP address of SMB destination server>\dest_share
7,142 scanned, 7,141 compared, 7,141 same, 0 different, 0 missing, 0
errors
Total Time : 1m2s
STATUS : PASSED
```

## 구성

를 클릭합니다 `configure` 명령은 SMB 시스템을 구성하고 PostgreSQL 데이터베이스가 실행 중인 시스템에 연결합니다.

```
xcp.exe configure
```

예제 보기

```
C:\NetApp\XCP>xcp.exe configure

Please choose the menu you want to start:
1. Configure xcp.ini file
0. Quit
```

## 경청하십시오

를 클릭합니다 `listen` 명령어는 XCP 바이너리를 읽고 XCP 서비스를 시작합니다.

구문

```
xcp.exe listen
```

예제 보기

```
c:\NetApp\XCP>xcp.exe listen
* Serving Flask app "xcp_rest_smb_app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production
deployment. Use a production WSGI server instead.
* Debug mode: off
```

# XCP 활용 사례

## XCP NFS 및 SMB의 사용 사례

NetApp XCP의 다양한 데이터 마이그레이션 사용 사례에 대해 알아보십시오.

"7-Mode에서 ONTAP로 데이터 마이그레이션"

"소스 스토리지 상자에서 ONTAP로 ACL을 사용한 CIFS 데이터 마이그레이션"

# XCP 로깅

## logConfig 옵션을 설정합니다

의 logConfig 옵션에 대해 알아봅니다 `xcpLogConfig.json` XCP NFS 및 SMB용 JSON 구성 파일입니다.

다음 예제는 "logConfig" 옵션이 포함된 JSON 구성 파일 세트를 보여줍니다.

- 예 *

```
{
"level":"INFO",
"maxBytes":"52428800",
"name":"xcp.log"
}
```

- 이 구성을 사용하면 에서 유효한 수준 값을 선택하여 심각도에 따라 메시지를 필터링할 수 있습니다 `CRITICAL`, `ERROR, WARNING, INFO`, 및 `Debug`.
- 를 클릭합니다 `maxBytes` 설정을 사용하면 회전 로그 파일의 파일 크기를 변경할 수 있습니다. 기본값은 50MB입니다. 값을 0으로 설정하면 회전이 중지되고 모든 로그에 대해 단일 파일이 생성됩니다.
- 를 클릭합니다 `name` 옵션은 로그 파일의 이름을 구성합니다.
- 키 값 쌍이 누락된 경우 시스템은 기본값을 사용합니다. 기존 키의 이름을 잘못 지정하는 경우 새 키로 처리되며 새 키는 시스템 작동 방법이나 시스템 기능에 영향을 주지 않습니다.

## EventLog 옵션을 설정합니다

XCP는 를 사용하여 활성화할 수 있는 이벤트 메시징을 지원합니다 `eventlog` 의 옵션 `xcpLogConfig.json` JSON 구성 파일.

NFS의 경우 모든 이벤트 메시지가 에 기록됩니다 `xcp_event.log` 파일이 기본 위치에 있습니다 `/opt/NetApp/xFiles/xcp/` 또는 다음 환경 변수를 사용하여 구성된 사용자 지정 위치:

`XCP_CONFIG_DIR`

> ⓘ    두 위치를 모두 설정하면 `XCP_LOG_DIR` 사용됩니다.

SMB의 경우 모든 이벤트 메시지가 파일에 기록됩니다 `xcp_event.log` 기본 위치에 있습니다 `C:\NetApp\XCP\`.

### NFS 및 SMB용 이벤트 메시징을 위한 JSON 구성

다음 예에서는 JSON 구성 파일을 통해 NFS 및 SMB에 대한 이벤트 메시징을 지원합니다.

**EventLog** 옵션이 활성화된 **JSON** 구성 파일 예

```
{
"eventlog": {
"isEnabled": true,
"level": "INFO"
},
"sanitize": false
}
```

**EventLog** 및 기타 옵션이 설정된 **JSON** 구성 파일 예

```
{
"logConfig": {
"level": "INFO",
"maxBytes": 52428800,
"name": "xcp.log"
},
"eventlog": {
"isEnabled": true,
"level": "INFO"
},
"syslog": {
"isEnabled": true,
"level": "info",
"serverIp": "10.101.101.10",
"port": 514
},
"sanitize": false
}
```

다음 표에서는 EventLog 하위 옵션과 해당 설명을 보여 줍니다.

| 하위 옵션 | **JSON** 데이터 유형 | 기본값 | 설명 |
|---|---|---|---|
| isEnabled | 부울 | 거짓 | 이 부울 옵션은 이벤트 메시징을 설정하는 데 사용됩니다. false 로 설정하면 이벤트 메시지가 생성되지 않고 이벤트 로그 파일에 이벤트 로그가 게시되지 않습니다. |
| level | 문자열 | 정보 | 이벤트 메시지 심각도 필터 수준입니다. 이벤트 메시징은 심각도가 낮은 5가지 심각도 수준(위험, 오류, 경고, 정보 및 디버그)을 지원합니다 |

**NFS** 이벤트 로그 메시지의 템플릿입니다

다음 표에서는 템플릿과 NFS 이벤트 로그 메시지의 예를 보여 줍니다.

| 템플릿 | 예 |
|--------|-----|
| `<Time stamp> - <Severity level> {"Event ID": <ID>, "Event Category":<category of xcp event log>, "Event Type": <type of event log>, "ExecutionId": < unique ID for each xcp command execution >, "Event Source": <host name>, "Description": <XCP event log message>}` | `2020-07-14 07:07:07,286 - ERROR {"Event ID": 51, "Event Category": "Application failure", "Event Type": "No space left on destination error", " ExecutionId ": 408252316712, "Event Source": "NETAPP-01", "Description": "Target volume is left with no free space while executing : copy {}. Please increase the size of target volume 10.101.101.101:/cat_vol"}` |

**EventLog** 메시지 옵션

EventLog 메시지에 사용할 수 있는 옵션은 다음과 같습니다.

- `Event ID`: 각 이벤트 로그 메시지의 고유 식별자입니다.
- `Event Category`: 이벤트 유형 및 이벤트 로그 메시지의 범주에 대해 설명합니다.
- `Event Type`: 이벤트 메시지를 설명하는 짧은 문자열입니다. 여러 이벤트 유형이 하나의 범주에 속할 수 있습니다.
- `Description`설명 필드에는 XCP에서 생성한 이벤트 로그 메시지가 포함됩니다.
- `ExecutionId`: 실행된 각 XCP 명령에 대한 고유 식별자입니다.

## syslog 클라이언트를 활성화합니다

XCP는 syslog 클라이언트를 지원하여 NFS 및 SMB용 원격 syslog 수신기로 XCP 이벤트 로그 메시지를 전송합니다. 기본 포트 514를 사용하여 UDP 프로토콜을 지원합니다.

**NFS** 및 **SMB**에 대해 **syslog** 클라이언트를 구성합니다

syslog 클라이언트를 활성화하려면 을 구성해야 합니다 `syslog` 옵션을 선택합니다 `xcpLogConfig.json` NFS 및 SMB에 대한 구성 파일

NFS 및 SMB용 syslog 클라이언트에 대한 다음 구성 예:

```
{
"syslog":{
"isEnabled":true,
"level":"INFO",
"serverIp":"10.101.101.d",
"port":514
},
"sanitize":false
}
```

**Syslog 옵션**

다음 표에는 syslog 하위 옵션 및 설명이 나와 있습니다.

| 하위 옵션 | **JSON** 데이터 유형 | 기본값 | 설명 |
|---|---|---|---|
| `isEnabled` | 부울 | 거짓 | 이 부울 옵션은 XCP에서 syslog 클라이언트를 활성화합니다. 를 로 설정합니다 false는 syslog 구성을 무시합니다. |
| `level` | 문자열 | 정보 | 이벤트 메시지 심각도 필터 수준입니다. 이벤트 메시징은 심각도가 낮은 5가지 심각도 수준(위험, 오류, 경고, 정보 및 디버그)을 지원합니다 |
| `serverIp` | 문자열 | 없음 | 이 옵션은 원격 syslog 서버 IP 주소 또는 호스트 이름을 나열합니다. |
| `port` | 인티거 | 514 | 이 옵션은 원격 syslog 수신기 포트입니다. 이 옵션을 사용하여 다른 포트에 syslog 데이터그램을 허용하도록 syslog 수신기를 구성할 수 있습니다. 기본 UDP 포트는 514입니다. |

> ⓘ 를 클릭합니다 `sanitize` "syslog" 구성에서 옵션을 지정하면 안 됩니다. 이 옵션은 전역 범위를 가지며 JSON config 내의 로깅, 이벤트 로그 및 syslog에 공통적으로 사용됩니다. 이 값을 "true"로 설정하면 syslog 서버에 게시된 syslog 메시지에 중요한 정보가 숨겨집니다.

**Syslog 메시지 형식입니다**

UDP를 통해 원격 syslog 서버로 전송되는 모든 syslog 메시지는 NFS 및 SMB에 대한 RFC 5424 형식에 따라 포맷됩니다.

다음 표는 XCP에 대한 syslog 메시지에 대해 지원되는 RFC 5424에 따른 심각도 수준을 보여 줍니다.

| 심각도 값 | 심각도 수준 |
|---|---|
| 3 | 오류: 오류 상태입니다 |
| 4 | 경고: 경고 상태 |
| 6 | 정보: 정보 메시지입니다 |
| 7 | 디버그: 디버그 수준 메시지 |

NFS 및 SMB에 대한 syslog 헤더에서 버전 값은 1이고 XCP에 대한 모든 메시지의 기능 값은 1로 설정됩니다(사용자 수준 메시지).
`<PRI> = syslog facility * 8 + severity value`

**NFS용 syslog 헤더가 있는 XCP 애플리케이션 syslog 메시지 형식:**

다음 표에는 NFS용 syslog 헤더가 있는 syslog 메시지 형식의 템플릿과 예가 나와 있습니다.

| 템플릿 | 예 |
|---|---|
| `<PRI><version> <Time stamp> <hostname> xcp_nfs - - - <XCP message>` | `<14>1 2020-07-08T06:30:34.341Z netapp xcp_nfs - - - INFO {"Event ID": 14, "Event Category": "XCP job status", "Event Type": "XCP scan completion", "Event Source": "netapp", "Description": "XCP scan is completed by scanning 8 items"}` |

**NFS에 대한 syslog 헤더가 없는 XCP 애플리케이션 메시지입니다**

다음 표에는 NFS에 대한 syslog 헤더가 없는 syslog 메시지 형식의 템플릿과 예가 나와 있습니다.

| 템플릿 | 예 |
|---|---|
| `<message severity level i.e CRITICAL, ERROR, WARNING, INFO, DEBUG> <XCP event log message>` | `INFO {"Event ID": 14, "Event Category": "XCP job status", "Event Type": "XCP scan completion", "Event Source": "netapp", "Description": "XCP scan is completed by scanning 8 items"}` |

**SMB용 syslog 헤더를 사용하는 XCP 애플리케이션 syslog 메시지 형식입니다**

다음 표에는 SMB용 syslog 헤더가 있는 syslog 메시지 형식의 템플릿과 예가 나와 있습니다.

| 템플릿 | 예 |
|---|---|
| `<PRI><version> <Time stamp> <hostname> xcp_smb - - - <XCP message` | `<14>1 2020-07-10T10:37:18.452Z bansala01 xcp_smb - - - INFO {"Event ID": 14, "Event Category": "XCP job status", "Event Type": "XCP scan completion", "Event Source": "NETAPP-01", "Description": "XCP scan is completed by scanning 17 items"}` |

**SMB용 syslog 헤더가 없는 XCP 애플리케이션 메시지**

다음 표에는 SMB에 대한 syslog 헤더가 없는 syslog 메시지 형식의 템플릿과 예가 나와 있습니다.

| 템플릿 | 예 |
|---|---|
| `<message severity level i.e CRITICAL, ERROR, WARNING, INFO, DEBUG> <XCP event log message>` | `NFO {"Event ID": 14, "Event Category": "XCP job status", "Event Type": "XCP scan completion", "Event Source": "NETAPP-01", "Description": "XCP scan is completed by scanning 17items"}` |

# XCP 이벤트 로그

## XCP NFS 이벤트 로그

XCP NFS에 대한 이벤트 로그 예를 검토합니다.

다음 표에는 XCP NFS에 대한 이벤트 로그가 나와 있습니다.

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 401 | `Mounted on NFS export <mount path> with maximum read block size <read block size> bytes, maximum write block size <write block size> bytes. Mount point has mode value<mode bits> and type: <fattr3 type>.` | `2020-07-14 03:53:59,811 - INFO {"Event ID":401, "Event Category": "Mounting unmounting file system", "Event Type": "Mount file system information", "ExecutionId": 408249379415, "Event Source": "NETAPP-01","Description": "Mounted on NFS export <IPaddress of NFS server>:/test1 with maximum read block size 65536 bytes, maximum write block size 65536 bytes. Mount point has mode value 493 and type : Directory"}` |
| 181 | `This license is issued to <username>of <company name>,license type is <license type> with <license status> status, license willexpire on <expire date>` | `2020-07-14 03:53:59,463 - INFO {"Event ID": 181, "Event Category": "Authentication and authorization", "Event Type": "License information", "ExecutionId": 408249379415, "Event Source": "NETAPP-01", "Description": "This license is issued to NetApp User of Network Appliance, Inc, license type is SANDBOX with ACTIVE status, license will expire on Thu Jul 1 00:00:00 2021"}` |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 183 | The license issued to `<username>` of `<company name>` will expire in less than one week | 2020-07-14 04:02:55,151 - WARNING {"Event ID": 183, "Event Category": "Authentication and authorisation", "Event Type": "License warning", "ExecutionId": 408249519546, "Event Source": "NETAPP-01", "Description": "The license issued to NetApp User of Network Appliance, Inc will expire in less than one week"} |
| 581 | Catalog path `<catalog volume path>` to store catalog directory is not accessible. Refer user guide for configuring catalog volume. | 2020-07-14 04:05:00,857 - ERROR {"Event ID": 581, "Event Category": "Catalog and indexing", "Event Type": "Catalog exporting error", "ExecutionId": 408249552351, "Event Source": "NETAPP-01", "Description": "Catalog path `<IP address of NFS server>`:/test11 to store catalog directory is not accessible. Refer user guide for configuring catalog volume."} |
| 582 | Failed creating catalog directory in catalog volume path `<catalog volume path>` | 2020-07-14 04:10:12,895 - ERROR {"Event ID": 582, "Event Category": "Catalog and indexing", "Event Type": "Catalog directory creation error", "ExecutionId": 408249630498, "Event Source": "NETAPP-01", "Description": "Failed creating catalog directory in catalogvolume path 10.234.104.250:/cat_vol"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 584 | `Error in creating index directory <index id> for <command>` | 2020-07-14 04:52:15,918 - ERROR {"Event ID":584, "Event Category": "Catalog and indexing", "Event Type": "Error in index creation", "ExecutionId": 408250278214, "Event Source": "NETAPP-01", "Description": "Error in creating index directory abc7 for scan"} |
| 586 | `Failed to create index <index id> in catalog volume while executing command : <command>` | 2020-07-14 04:45:46,275 - ERROR {"Event ID": 586, "Event Category": "Catalog and indexing", "Event Type": "Error in index creation", "ExecutionId": 408250177021, "Event Source": "NETAPP-01", "Description": "Failed to create index abc6 in catalog volume while executing command : scan {- newid: 'abc6'}"} |
| 351 | `System resources available while executing xcp command: <command>, are : <CPU info>, <memory info>` | 2020-07-14 05:08:35,393 - INFO {"Event ID":351, "Event Category": "System resource utilization", "Event Type": "Resources available for scan", "ExecutionId": 408250529264, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : scan , are : CPU: count 4, load avg (1/5/15m) 0.0, 0.0, 0.0, System memory (GiB): avail 7.3, total 7.8, free 6.6, buffer 0.1, cache 0.5"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 13 | XCP <command> is running on platform <platform info> for source <source info> | 2020-07-14 05:08:35,478 - INFO {"Event ID": 13, "Event Category": "XCP job status", "Event Type": "Starting xcp scan operation", "ExecutionId": 408250529264, "Event Source": "NETAPP-01", "Description": "XCP command : scan {-newid: 'abc7'} is running on platform Linux-2.6.26-2-amd64-x86_64-with-debian- 5.0.10 for source 10.234.104.250:/test1"} |
| 14 | XCP scan completed successfully after scanning <scan item count> items. Source : <source scanned> | 2020-07-14 05:08:35,653 - INFO {"Event ID": 14, "Event Category": "XCP job status", "Event Type": "XCP scan completion", "ExecutionId": 408250529264, "Event Source": "NETAPP-01", "Description": "XCP scan completed successfully after scanning 479 items. Source : 10.234.104.250:/test1"} |
| 354 | System resources available while executing xcp command: <command>, are : <CPU info>, <memory info> | 2020-07-14 05:15:13,562 - INFO {"Event ID": 354, "Event Category": "System resource utilization", "Event Type": "Resources available for copy", "ExecutionId": 408250596708, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : copy , are : CPU: count 4, load avg (1/5/15m) 0.0, 0.0, 0.0, System memory (GiB): avail 7.3, total 7.8, free 6.6, buffer 0.1, cache 0.5"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 25 | XCP <command> is running on platform <platform info> for source <copy source> and destination <copy destination/target> | 2020-07-14 05:15:13,647 - INFO {"Event ID": 25, "Event Category": "XCP job status", "Event Type": "Starting xcp copy operation", "ExecutionId": 408250596708, "Event Source": "NETAPP-01", "Description": "XCP command : copy {} is running on platform Linux-2.6.26- 2-amd64-x86 64-with-debian-5.0.10 for source <IP address of NFS server>:/source_vol and destination <NFS destination source>:/test1"} |
| 26 | XCP copy completed successfully after scanning <scanned item count> of which <matched item count> are matched and <copied item count> items are copied to the destination. Source : <copy source>, destination :<copy destination/target | 2020-07-14 05:15:13,885 - INFO {"Event ID":26, "Event Category": "XCP job status", "Event Type": "XCP copy completion", "ExecutionId": 408250596708, "Event Source": "NETAPP-01", "Description": "XCP copy completed successfully after scanning 3 of which 0 are matched and 2 items are copied to the destination. Source : <IP address of NFS server>:/source_vol, destination : <NFS destination source>:/test1"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 16 | XCP <command> is running on platform <platform info> for source <sync source> and destination <sync destination> | 2020-07-14 06:41:20,145 - INFO {"Event ID": 16, "Event Category": "XCP job status", "Event Type": "Starting xcp sync operation", "ExecutionId": 408251920146, "Event Source": "NETAPP-01", "Description": "XCP command : sync {-id: 'autoname_copy_2020-07- 14_06.22.07.233271'} is running on platform Linux-2.6.26-2-amd64-x86_64-with-debian-5.0.10 for source <IP address of NFS server>:/src_vol and destination <NFS destination source>:/dest_vol"} |
| 352 | System resources available while executing xcp command: <command>, are : <CPU info>, <memory info> | 2020-07-14 06:41:28,728 - INFO {"Event ID": 352, "Event Category": "System resource utilization", "Event Type": "Resource available for sync", "ExecutionId": 408251920146, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : sync {-id: 'autoname_copy_2020-07-14_06.22.07.233271'} , are : CPU: count 4, load avg (1/5/15m) 0.1, 0.0, 0.0, System memory (GiB): avail 7.2, total 7.8, free 6.6, buffer 0.1, cache 0.5"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 17 | XCP sync is completed. Total scanned \<scanned item count\>, copied \<copied item count\>, modification \<modification item count\>, new file \<new file count\>, delete item \<delete item count\>. Command executed : \<command\> | 2020-07-14 06:41:29,245 - INFO {"Event ID":17, "Event Category": "XCP job status", "Event Type": "XCP sync completion", "ExecutionId": 408251920146, "Event Source": "NETAPP-01", "Description": "XCP sync is completed. Total scanned 66, copied 0, modification 1, new file 0, delete item 0. Command executed : sync {-id: 'autoname_copy_2020-07-14_06.22.07.233271'}"} |
| 19 | XCP \<command\> is running on platform \<platform info\> for source \<verify source\> and destination \<verify destination\> | 2020-07-14 06:54:59,084 - INFO {"Event ID": 19, "Event Category": "XCP job status", "Event Type": "Starting xcp verify operation", "ExecutionId": 408252130477, "Event Source": "NETAPP-01", "Description": "XCP command : verify {} is running on platform Linux-2.6.26-2-amd64-x86_64-with- debian-5.0.10 for source \<IP address of NFS server\>:/src_vol and destination \<IP address of NFS destination server\>:/dest_vol"} |
| 353 | System resources available while executing xcp command: \<command\>, are : \<CPU info\>, \<memory info\> | 2020-07-14 06:54:59,085 - INFO {"Event ID": 353, "Event Category": "System resource utilization", "Event Type": "Resources available for verify", "ExecutionId": 408252130477, "Event Source": "NETAPP-01","Description": "System resources available while executing xcp command : verify , are : CPU: count 4, load avg (1/5/15m) 0.0, 0.0, 0.0, System memory (GiB): avail 7.3, total 7.8, free 6.6, buffer 0.1, cache 0.5"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 211 | `log file path : <file path> , severity filter level <severity level>, log message sanitization is set as <sanitization value>` | `2020-07-14 06:40:59,104 - INFO {"Event ID": 211, "Event Category": "Logging and supportability", "Event Type": "XCP logging information", "ExecutionId": 408251920146, "Event Source": "NETAPP-01", "Description": "Log file path : /opt/NetApp/xFiles/xcp/xcplogs/ xcp.log, severity filter level INFO, log message sanitization is set as False"}` |
| 215 | `Event file path: <file path>, severity filter level <severity level>, event message sanitization is set as <sanitization value>` | `2020-07-14 06:40:59,105 - INFO {"Event ID": 215, "Event Category": "Logging and supportability", "Event Type": "XCP event information", "ExecutionId": 408251920146, "Event Source": "NETAPP-01", "Description": "Event file path :/opt/NetApp/xFiles/xcp/xcplogs /xcp_event.log, severity filter level INFO, event message sanitization is set as False"}` |
| 54 | `Catalog volume is left with no free space please increase the size of catalog volume <catalog volume running out of space>` | `2020-07-14 04:10:12,897 - ERROR {"Event ID":54, "Event Category": "Application failure", "Event Type": "No space left on Catalog volume error", "ExecutionId": 408249630498, "Event Source": "NETAPP-01", "Description": "Catalog volume is left with no free space. Please increase the size of catalog volume<IP address of NFS destination server>:/cat_vol"}` |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 53 | Catalog volume <catalog volume> is left with no free space to store index <index id> while executing <command>. Please increase the size of the catalog volume <catalog volume running out of space> | 2020-07-14 04:52:15,922 - ERROR {"Event ID": 53, "Event Category": "Application failure", "Event Type": "No space left for catalog volume error", "ExecutionId": 408250278214, "Event Source": "NETAPP-01", "Description": "Catalog volume 10.234.104.250:/cat_vol is left with no free space to store index abc7 while executing : scan {-newid: 'abc7'}. Please increase the size of the catalog volume <IP address of NFS destination server>:/cat_vol"} |
| 61 | NFS LIF <LIF IP> is not reachable for path <volume path without IP> while executing <command>. Please check volume is not offline and is reachable. | 2020-07-14 07:38:20,100 - ERROR {"Event ID":61, "Event Category": "Application failure", "Event Type": "NFS mount has failed", "ExecutionId": 408252799101, "Event Source": "NETAPP-01", "Description": "NFS LIF <IP address of NFS destination server> is not reachable for path /test11 while executing : scan {}. Please check volume is not offline and is reachable"} |
| 71 | TCP connection could not be established for IP address <IP>. Check network setting and configuration. | 2020-07-14 07:44:44,578 - ERROR {"Event ID": 71, "Event Category": "Application failure", "Event Type": "IP is not active", "ExecutionId": 408252889541, "Event Source": "NETAPP-01", "Description": "TCP connection could not be established to the address <IP address of NFS destination server>. Check network setting and configuration."} (UT done) |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 51 | Target volume is left with no free space while executing: <command>. Please increase the size of target volume <volume running out of space>. | 2020-07-14 07:07:07,286 - ERROR {"Event ID": 51, "Event Category": "Application failure", "Event Type": "No space left on destination error", "ExecutionId": 408252316712, "Event Source": "NETAPP-01", "Description": "Target volume is left with no free space while executing : copy {}. Please increase the size of target volume <IP address of NFS destination server>:/cat_vol"} |
| 76 | Index id {} is already present . Use new index id and rerun command : <command> | 2020-07-14 09:18:41,441 - ERROR {"Event ID": 76, "Event Category": "Application failure", "Event Type": "Index ID problem", "ExecutionId": null, "Event Source": "NETAPP-01", "Description": "Index id asd is already present . Use new index id and rerun command: scan {-newid: 'asd'} "} |
| 362 | CPU usage has crossed <percentage CPU used>% | 2020-06-16 00:17:28,294 - ERROR {"Event ID": 362, "Event Category": "System resource utilization", "Event Type": "resources available for xcp", "Event Source": "NETAPP- 01 ", "Description": "CPU Usage has crossed 90.07%"} |
| 363 | Memory Usage has crossed <percentage memory used>% | 2020-06-16 00:17:28,300 - ERROR {"Event ID": 363, "Event Category": "System resource utilization", "Event Type": "resources available for xcp", "Event Source": "NETAPP- 01", "Description": "Memory Usage has crossed 95%"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 22 | XCP <command> is running on platform <platform information> for source <resume source> and destination <resume destination> | 2020-07-14 06:24:26,768 - INFO {"Event ID": 22, "Event Category": "XCP job status", "Event Type": "Starting xcp resume operation", "ExecutionId": 408251663404, "Event Source": "NETAPP-01", "Description": "XCP command : resume {-id: 'autoname_copy_2020-07-14_06.22.07.233271'} is running on platform Linux-2.6.26-2-amd64- x86_64-with-debian-5.0.10 for source <IP address for NFS sever>:/src_vol and destination <IP address of NFS destination server>:/dest_vol"} |
| 356 | System resources available while executing xcp command: <command> , are : <CPU info>, <memory information> | 2020-07-14 06:24:26,837 - INFO {"Event ID": 356, "Event Category": "System resource utilization", "Event Type": "Resource available for resume", "ExecutionId": 408251663404, "Event Source": "NETAPP-01","Description": "System resources available while executing xcp command : resume {-id: 'autoname_copy_2020-07-14_06.22.07.233271'} , are : CPU: count 4, load avg (1/5/15m) 0.1, 0.1, 0.0, System memory (GiB): avail 7.2,total 7.8, free 6.6, buffer 0.1, cache 0.5"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 23 | XCP resume is completed. Total scanned items <scanned item count>, total copied items <copied item count>. Command executed :<command> | 2020-07-14 06:26:15,608 - INFO {"Event ID": 23, "Event Category": "XCP job status", "Event Type": "XCP resume completion", "ExecutionId": 408251663404, "Event Source": "NETAPP-01", "Description": "XCP resume is completed. Total scanned items 5982, total copied items 5973. Command executed : resume {-id: 'autoname_copy_2020-07-14_06.22.07.233271'} "} |
| 76 | Index id <index id> is already present. Use new index id and rerun command : <command> | 2020-07-14 09:43:08,381 - ERROR {"Event ID": 76, "Event Category": "Application failure", "Event Type": "Index ID problem", "ExecutionId": null, "Event Source": "NETAPP-01", "Description": "Index id asd is already present . Use new index id and rerun command : scan {-newid: 'asd'} "} |
| 82 | Index id <index id> used while executing sync is incomplete. Try resume on the existing index id <index id> | 2020-07-14 10:33:09,307 - ERROR {"Event ID": 82, "Event Category": "Application failure", "Event Type": "Incomplete index used for sync", "ExecutionId": null, "Event Source": "NETAPP-01", "Description": "Index id autoname_copy_2020-07-14_10.28.22.323897 used while executing sync is incomplete. Try resume on the existing index id autoname_copy_2020-07-14_10.28.22.323897."} |
| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 365 | CPU utilization reduced to <CPU percentage used>% | 2020-07-14 09:43:08 381 - ERROR {"Event ID": 364, "Event Category": "System resource utilization", "Event Type": "Resources available for xcp", "ExecutionId": 408251663404, "Event Source": "NETAPP-01", "Description": " CPU utilization reduced to 26%} |
| 364 | Memory utilization reduced to <CPU percentage used>% | 2020-07-14 09:43:08,381 - INFO {"Event ID": 364, "Event Category": " Resources available for xcp", "Event Type": "Resources available for xcp", "ExecutionId": 408351663478, "Event Source": "NETAPP-01", "Description": " Memory utilization reduced to 16.2%"} |
| 10 | XCP command <command> has failed | 2020-07-14 09:43:08,381 - INFO {"Event ID": 10, "Event Category": " Xcp job status", "Event Type": "XCP command failure", "ExecutionId":4082516634506, "Event Source": "NETAPP-01", "Description": " XCP command verify has failed" |

## XCP SMB 이벤트 로그

XCP SMB에 대한 이벤트 로그 예를 검토합니다.

다음 표에는 XCP SMB에 대한 이벤트 로그가 나와 있습니다.

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 355 | CPU usage has crossed <CPU percentage use>% | 2020-06-23 12:42:02,705 - INFO {"Event ID": 355, "Event Category": "System resource utilization", "Event Type": "CPU usage for xcp", "Event Source": "NETAPP-01", "Description": "CPU usage has crossed 96%"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 356 | Memory usage has crossed <memory percentage use>% | 2020-06-23 12:42:02,705 - INFO {"Event ID": 356, "Event Category": "System resource utilization", "Event Type": "Memory usage for xcp", "Event Source": "NETAPP-01", "Description": "CPU usage has crossed92.5%"} |
| 61 | Address was not found: <complete address over which command is fired> | 2020-07-15 02:57:06,466 - ERROR {"Event ID": 61, "Event Category": "Application Failure", "Event Type": "Address was not found", "ExecutionId": 408264113696, "Event Source": "NETAPP-01", "Description": "Address was not found: \"\\\\\<IP address of SMB server>\\cifs1\""} |
| 62 | Interface cannot be found: < complete address over which command is fired > | 2020-07-15 02:52:00,603 - ERROR {"Event ID": 62, "Event Category": "Application Failure", "Event Type": "Interface was not found", "ExecutionId": 408264071616, "Event Source": "NETAPP-01", "Description": "Interface cannot be found: \"\\\\\<IP address of SMB server>\\cifs11\""} |
| 63 | Invalid Address. Please make sure that the Address starts with '\\' | 2020-07-15 03:00:10,422 - ERROR {"Event ID": 63, "Event Category": "Application Failure", "Event Type": "Invalid Address", "ExecutionId": 408264197308, "Event Source": "NETAPP-01", "Description": "Invalid Address. Please make sure that the Address starts with '\\'"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 41 | Destination volume is left with no free space please increase the size target volume:<destination volume> | 2020-06-15 17:12:46,413 - ERROR {"Event ID": 41, "Event Category": "Application Failure", "Event Type": "No space left on destination error", "Event Source": "NETAPP-01", "Description": "Destination volume is left with no free space please increase the size of target volume: <IP address of SMB server>\\to"} |
| 211 | Log file path : <file path>, severity filter level <severity level>, log message sanitization is set as <value of sanitization option> | {"Event ID": 211, "Event Category": "Logging and supportability", "Event Type": "XCP logging information", "ExecutionId": 408252673852, "Event Source": "NETAPP-01", "Description": "Log file path : C:\\NetApp\\XCP\\Logs\\xcp.log, severity filter level DEBUG, log message sanitization is set as False"} |
| 215 | Event file path : <file path>, severity filter level <severity level>, Event message sanitization is set as <sanitization option> | {"Event ID": 215, "Event Category": "Logging and supportability", "Event Type": "XCP event information", "ExecutionId": 408252673852, "Event Source": "NETAPP-01", "Description": "Event file path : C:\\NetApp\\XCP\\Logs\\xcp_event.log, severity filter level INFO, Event message sanitization is set as False"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 181 | This license is issued to <user name> of <company name>, license type is <license type> with <status> status, license will expire expires on <expiration date> | {"Event ID": 181, "Event Category": "Authentication and authorization", "Event Type": "license information", "ExecutionId": 408252673852, "Event Source": "NETAPP-01", "Description": "This license is issued to calin of NetApp Inc, license type is SANDBOX with ACTIVE status, license will expire on Mon Dec 31 00:00:00 2029"} |
| 13 | XCP <command> is running on platform <platform information> for source <scan source> | 2020-07-15 02:12:56,917 - INFO {"Event ID": 13, "Event Category": "XCP job status", "Event Type": "Starting xcp scan operation", "ExecutionId": 408263470688, "Event Source": "NETAPP-01", "Description": "XCP {scan} is running on platform Windows- 8.1-6.3.9600-SP0 for source \\\\<IP address of SMB server>\\cifs"} |
| 351 | System resources available wile command : <command>, are : cpu <CPU information>, total memory <total memory on system>, available memory | 2020-07-15 02:12:56,917 - INFO {"Event ID": 351, "Event Category": "System resource utilization", "Event Type": "Resources available for scan", "ExecutionId": 408263470688, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : scan, are : cpu 4, total memory 8.00GiB, available memory 6.81GiB"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 14 | XCP scan completed successfully after scanning <scanned items count> items. Source :<scan source> | 2020-07-15 02:12:57,932 - INFO {"Event ID": 14, "Event Category": "XCP job status", "Event Type": "XCP scan completion", "ExecutionId": 408263470688, "Event Source": "NETAPP-01", "Description": "XCP scan completed successfully after scanning 29 items. Source : \\\\<IP address of SMB server>\\cifs"} |
| 25 | XCP <command> is running on platform <platform information> for source <copy source> and destination <copy destination> | 2020-07-15 02:19:06,562 - INFO {"Event ID": 25, "Event Category": "XCP job status", "Event Type": "Starting xcp copy operation", "ExecutionId": 408263563552, "Event Source": "NETAPP-01", "Description": "XCP {copy} is running on platform Windows- 8.1-6.3.9600-SP0 for source \\\\<IP address of SMB server>\\cifs and destination \\\\<IP address of SMB destination server>\\source_vol"} |
| 352 | System resources available while executing command :<command>, are : cpu <CPU information>, total memory <Total memory>, available memory <memory available for execution> | 2020-07-15 02:19:06,562 - INFO {"Event ID": 352, "Event Category": "System resource utilization", "Event Type": "Resources available for copy", "ExecutionId": 408263563552, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : copy, are : cpu 4, total memory 8.00GiB, available memory 6.82GiB"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 26 | XCP copy completed successfully after copying <copied items count> items. Source :<copy source>, destination : <copy destination> | 2020-07-15 02:19:14,500 - INFO {"Event ID": 26, "Event Category": "XCP job status", "Event Type": "XCP copy completion", "ExecutionId": 408263563552, "Event Source": "NETAPP-01", "Description": "XCP copy completed successfully after copying 0 items. Source :" |
| 16 | XCP <command> is running on platform <platform> for source <sync source> and destination <sync destination> | 2020-07-15 02:27:10,490 - INFO {"Event ID": 16, "Event Category": "XCP job status", "Event Type": "Starting xcp sync operation", "ExecutionId": 408263688308, "Event Source": "NETAPP-01", "Description": "XCP {sync} is running on platform Windows- 8.1-6.3.9600-SP0 for source \\\\<IP address of SMB server>\\cifs and destination \\\\<IP address of SMB destination server>\\source_vol"} |
| 353 | System resources available while executing xcp command: <command>, are : cpu <CPU information>, total memory <total memory>, available memory <available memory> | 2020-07-15 02:27:10,490 - INFO {"Event ID": 353, "Event Category": "System resource utilization", "Event Type": "Resources available for sync", "ExecutionId": 408263688308, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : sync, are : cpu 4, total memory 8.00GiB, available memory 6.83GiB"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 17 | XCP sync completed successfully after scanning <scanned item count> items, copying <copied item count> items, comparing <compared item count> items, removing <removed item count> items. Source : <sync source>, destination : <sync destination> | 2020-07-15 03:04:14,269 - INFO {"Event ID": 17, "Event Category": "XCP job status", "Event Type": "XCP sync completion", "ExecutionId": 408264256392, "Event Source": "NETAPP-01", "Description": "XCP sync completed successfully after scanning30 items, copying 20 items, comparing 30 items, removing 0 items. Source : \\\\<IP address of SMB server>\\cifs, destination :\\\\<IP address of SMB destination server>\\source_vol"} |
| 19 | XCP <command> is running on platform <platform information> for source <verify source> and destination <verify destination> | 2020-07-15 03:14:04,854 - INFO {"Event ID": 19, "Event Category": "XCP job status", "Event Type": "Starting xcp verify operation", "ExecutionId": 408264409944, "Event Source": "NETAPP-01", "Description": "XCP {verify -noacl} is running on platform Windows-8.1-6.3.9600-SP0 for source \\\\<IP address of SMB server>\\cifs and destination \\\\<IP address of SMB destination server>\\source_vol"} |
| 354 | System resources available for command : <command>, are : cpu <CPU information>, total memory <total memory>, available memory <available memory for execution> | 2020-07-15 03:14:04,854 - INFO {"Event ID": 354, "Event Category": "System resource utilization", "Event Type": "Resources available for verify", "ExecutionId": 408264409944, "Event Source": "NETAPP-01", "Description": "System resources available while executing xcp command : verify, are : cpu 4, total memory 8.00GiB, available memory 6.80GiB"} |

| 이벤트 ID입니다 | 이벤트 템플릿 | 이벤트 예 |
|---|---|---|
| 20 | XCP verify is completed by scanning <scanned item count> items, comparing <compared item count> items | {"Event ID": 20, "Event Category": "XCP job status", "Event Type": "XCP verify completion", "command Id": 408227440800, "Event Source": "NETAPP-01", "Description": "XCP verify is completed by scanning 59 items, comparing 0 items"} |
| 357 | CPU utilization reduced to <CPU utilization percentage>% | {"Event ID": 357, "Event Category": "System resource utilization", "Event Type": "CPU usage for xcp", "Event Source": "NETAPP- 01", "Description": "CPU utilization reduced to 8.2%"} |
| 358 | Memory utilization reduced to <memory utilization percentage>% | {"Event ID": 358, "Event Category": "System resource utilization", "Event Type": "Memory usage for xcp", "Event Source": "NETAPP-01", "Description": "Memory utilization reduced to 19%"} |
| 10 | XCP command <command> has failed | 2020-07-14 09:43:08,381 - INFO {"Event ID": 10, "Event Category": " Xcp job status", "Event Type": "XCP command failure", "Event Source": "NETAPP-01", "Description": " XCP command H:\\console_msg\\xcp_cifs\\xcp\\ main .py verify \\\\\<IP address of SMB server>\\cifs \\\\\<IP address of SMB destination server>\\source_vol has failed" |