



# smb 命令參照

## XCP

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# smb 命令參照

## 說明

中小企業 help 命令會顯示命令清單、命令參數、以及每個參數的簡短說明。此命令對於剛接觸 XCP 的初學者非常有用。

### 語法

```
xcp --help
```

### 顯示範例

```
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
```

## Help <command>

搭配使用 <command> help 顯示指定 <command> 的範例和選項詳細資料。

### 語法

```
xcp help <command>
```

下列範例輸出顯示的詳細資料、使用方式、引數和選用引數 `sync` 命令。



```

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 of local
(non-domain) source machine groups (eg. domain\administrators)
-l                  increase output
-root               sync acl for root directory
C:\Users\Administrator\Desktop\xcp>

```

## 顯示

中小企業 `show` 命令會查詢一或多個儲存伺服器的 RPC 服務和 NFS 匯出。此命令也會列出可用的服務和匯出、以及每個匯出的已使用和可用容量、以及每個匯出的根目錄屬性。

### 語法

- `show` 命令需要 NFSv3 匯出系統的主機名稱或 IP 位址：

```
xcp show \\<IP address or hostname of SMB server>
```

## 顯示範例

```
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
```

下表列出 show 參數及其說明。



| 參數             | 說明                            |
|----------------|-------------------------------|
| 顯示 -v          | 使用 IP 位址或主機名稱列印 SMB 伺服器的詳細資料。 |
| 顯示 -h 、 --help | 顯示如何使用命令的詳細資訊。                |

## 授權

中小企業 `license` 命令會顯示 XCP 授權資訊。

語法

```
xcp license
```

顯示範例

```
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
```

## 啟動

中小企業 `activate` 命令會啟動 XCP 授權。執行此命令之前、請確認已下載授權檔案並複製到 XCP 主機或用戶端機器的 C : \NetApp\XCP 目錄。授權可在任何數量的主機上啟動。

語法

```
xcp activate
```

## 顯示範例

```
C:\Users\Administrator\Desktop\xcp>xcp activate
XCP activated
```

## 掃描

中小企業 scan 命令會遞迴掃描整個 SMB 共用區、並在結束前列出所有檔案 scan 命令。

### 語法

```
xcp scan \\<SMB share path>
```

## 顯示範例

```
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
```

下表列出 scan 參數及其說明。

| 參數             | 說明               |
|----------------|------------------|
| 掃描 -h \ - help | 顯示如何使用掃描命令的詳細資訊。 |

| 參數  | 說明  |
|---|---|
| 掃描 -v                                     | 增加除錯的詳細度。   |
| <<smb_scan_parallel,掃描平行 ; n>             | 指定並行處理程序的數目（預設值：<cpu-count>）。                                 |
| <<smb_scan_match_filter,掃描 - 符合 ; 篩選器 >   | 僅處理符合篩選條件的檔案和目錄。  |
| <<smb_scan_exclude_filter,掃描 - 排除 ; 篩選器 > | 僅排除篩選器中的檔案和目錄。  |
| 掃描 -preserve-atime                        | 還原上次存取的來源日期。  |
| <<smb_scan_depth,掃描深度 ; n>                | 將搜尋深度限制在 n 個層級。   |
| 掃描 - 統計資料                                 | 以樹狀結構統計報告格式列出檔案。  |
| 掃描 -HTML                                  | 以樹狀結構統計 HTML 報告格式列出檔案。  |
| 掃描 -csv                                   | 以樹狀結構統計 CSV 報告格式列出檔案。   |
| 掃描 -l                                     | 以長列表輸出格式列出檔案。   |
| [掃描擁有權]                                   | 擷取來源上檔案和目錄的擁有權資訊系統。   |
| 掃描 -du                                    | 摘要說明每個目錄（包括子目錄）的空間使用量。  |
| <<smb_scan_fmt,掃描 -fmt ; 運算式 >            | 根據 Python 運算式格式化檔案清單（請參閱 <code>xcp help -fmt</code> 以取得詳細資料）。 |
| [掃描廣告]                                    | 遞迴掃描整個 SMB 共用區、並列出所有檔案及任何相關的替代資料流。                            |

## 掃描 -h 、 - help

使用 -h 和 --help 的參數 scan 命令顯示如何使用掃描命令的詳細資訊。

語法

```
xcp scan --help
```

## 顯示範例

```
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
```

## 掃描 -v

使用 -v 參數 scan 命令提供詳細的記錄資訊、以便在報告錯誤或警告時進行疑難排解或偵錯。

## 語法

```
xcp scan -v \\<IP address or hostname of SMB server>\source_share
```

## 顯示範例

```
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
```

## 掃描平行 <n>

使用 `-parallel <n>` 參數 `scan` 命令可設定較高或較低數量的 XCP 並行處理程序。



n 的最大值為 61。

## 語法

```
xcp scan -parallel <n> \\<IP address or hostname of SMB  
server>\source_share
```

## 顯示範例

```
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
```

## 掃描 - 比對 <filter>

使用 `-match <filter>` 參數 `scan` 僅處理符合篩選條件的檔案和目錄的命令。

## 語法

```
xcp scan -match <filter> \\<IP address or hostname of SMB
server>\source_share
```

在下列範例中、`scan -match` 掃描在一個月到一年之間變更的所有檔案、並針對找到的每個檔案、在主控台列印一行。會針對每個檔案傳回上次修改時間的 ISO 格式、人類可讀的檔案大小、檔案類型及其相對路徑。

## 顯示範例

```
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
```

在下列範例中、`scan -match` 列出 3 個月以上未修改且大小大於 4 MB 的檔案。



## 顯示範例

```
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
```

下列兩個範例中的第一個僅符合目錄、格式化會在變數「mtime」、「Relative path」和「depth」之間新增一個逗號。

第二個範例會將相同的輸出重新導向至「name.csv」。

## 顯示範例

```
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
```

## 顯示範例

```
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
```

下列範例會列印完整路徑和原始路徑 `mtime` 不是目錄的所有檔案的值。◦ `mtime` 值會加上 70 個字元、以利提供可讀取的主控台報告。

## 顯示範例

```
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
```

## 掃描 - 排除 <filter>

使用 `-exclude <filter>` 使用 `scan` 根據篩選器中的模式排除目錄和檔案的命令。

語法

```
xcp scan -exclude <filter> \\<IP address or hostname of SMB
server>\source_share
```

在下列範例中、`scan -exclude` 排除在一個月到一年之間變更的任何檔案、並針對未排除的每個檔案、在控制台列印一行。針對每個檔案所列印的詳細資料為其上次修改時間的 ISO 格式、檔案的人類可讀大小、檔案類型及其相對路徑。

## 顯示範例

```
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
```

在下列範例中、 scan -exclude 列出未修改超過三個月且大小超過 5.5 KB 的未排除檔案。針對每個檔案所列

印的詳細資料是其上次修改時間的 ISO 格式、檔案的人類可讀大小、檔案類型及其相對路徑。

#### 顯示範例

```
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
```

以下範例不包含目錄。它會列出未排除的檔案、其中的格式設定會在變數之間新增一個逗號 mtime、relpath 和 depth。

## 顯示範例

```
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
```

以下範例會列印完整的檔案路徑和原始檔案 mtimevalue 所有非目錄的檔案。 。 mtimevalue 以 70 個字元填充、方便閱讀主控台報告。

## 顯示範例

```
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
```

## 掃描 -preserve-ctime

使用 -preserve-ctime 參數 scan 命令可還原來源上所有檔案的上次存取日期、然後重設 ctime 到 XCP 讀取檔案之前的原始值。

掃描 SMB 共用時、檔案上的存取時間會修改（如果儲存系統設定為修改） ctime 讀取時）、因為 XCP 正在逐一讀取檔案。XCP 永遠不會變更 ctime、只會讀取檔案、就會在其上觸發更新 `ctime`。

## 語法

```
xcp scan -preserve-ctime \\<IP address or hostname of SMB
server>\source_share
```



## 顯示範例

```
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
```

## 掃描深度 <n>

使用 `-depth <n>` 參數 `scan` 限制 SMB 共用目錄搜尋深度的命令。



- `-depth` 選項指定 XCP 如何將檔案掃描至子目錄。

## 語法

```
xcp scan -depth <2> \\<IP address or hostname of SMB server>\source_share
```

## 顯示範例

```
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_Utills.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
```

## 掃描 - 統計資料

使用 `-stats` 參數 `scan` 以樹狀結構統計報告格式列出檔案的命令。

語法

```
xcp scan -stats \\<IP address or hostname of SMB server>\source_share
```

顯示範例

```

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

```

## 掃描 -HTML

使用 `-html` 參數 `scan` 列出 HTML 統計報告中檔案的命令。



XCP 報告 (.csv、.html) 會儲存在 XCP 二進位檔案所在的相同位置。檔案名稱格式為 `<xcp_process_id> <time_stamp>`。當 XCP 無法將安全性識別碼 (SID) 對應至擁有者名稱時、它會使用位於 SID 最後一個「-」之後的最後幾個數字來代表擁有者。例如、當 XCP 無法將 SID S-1-5-21-1896871423-3211229150-3383017265-4854184 對應至其擁有者時、它會使用 4854184 代表擁有者。

### 語法

```
xcp scan -stats -html -preserve-atime -ownership \\<IP address or hostname
of SMB server>\source_share
```

顯示範例

```
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

```

| Category | 1-10 | 10-100 | 100-1K | 1K-10K | >10K |
|----------|------|--------|--------|--------|------|
| empty    | 42   | 2690   | 420    |        |      |

```

== Depth ==
  0-5      6-10      11-15      16-20      21-100
>100
  3832     12527     1424

```

| Category | 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

```

| Category | >1 year | >1 month | 1-31 days | 1-24 hrs | <1 hour |
|----------|---------|----------|-----------|----------|---------|
| <15 mins | 11718   | 2961     |           |          | 3110    |

```

== Created ==
  >1 year      >1 month      1-31 days      1-24 hrs      <1 hour      <15
mins          future        invalid

```

| Category | >1 year | >1 month | 1-31 days | 1-24 hrs | <1 hour | <15 mins |
|----------|---------|----------|-----------|----------|---------|----------|
|          |         |          |           | 1        | 17788   |          |

```

== Accessed ==
  >1 year      >1 month      1-31 days      1-24 hrs      <1 hour      <15
mins          future        invalid

```

| Category | >1 year | >1 month | 1-31 days | 1-24 hrs | <1 hour | <15 mins |
|----------|---------|----------|-----------|----------|---------|----------|
|          |         |          |           |          | 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

```

## 掃描 -csv

使用 -csv 參數 scan 用於列出 CSV 樹狀結構統計資料報告中檔案的命令。



## 語法

```
xcp scan -stats -csv -preserve-atime -ownership \\<IP address or hostname  
of SMB server>\source_share
```

顯示範例

```
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 |
|------|------|-------|--------------|------|------|
| 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-ctime -ownership \\<IP address or
hostname of SMB server>\source_share
17,789 scanned, 0 matched, 0 errors Total Time : 40s
STATUS : PASSED

```

## 掃描 -l

使用 -l 參數 scan 以長清單輸出格式列出檔案的命令。

## 語法

```
xcp scan -l \\<IP address or hostname of SMB server>\source_share
```

## 顯示範例

```
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
```

## 掃描擁有權

使用 `-ownership` 參數 `scan` 擷取檔案所有權資訊的命令。



您只能使用 `-ownership` 使用 `-l`、`-match`、`-fmt` 或 `-stats` 參數。

### 語法

```
xcp scan -l -ownership \\<IP address or hostname of SMB  
server>\source_share
```

## 顯示範例

```
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
```

## 掃描 -du

使用 -du 參數 scan 用於總結每個目錄（包括子目錄）的空間使用情況的命令。

語法

```
xcp scan -du \\<IP address or hostname of SMB server>\source_share
```

顯示範例

```
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
```

## 掃描 -fmt <expression>

使用 -fmt <expression> 參數 scan 根據定義的運算式格式化檔案清單的命令。

語法

```
xcp scan -fmt "'", '.join(map(str, [relpath, name, size, depth]))'
\\<IPaddress or hostname of SMB server>\source_share
```



## 顯示範例

```
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
```

## 掃描廣告

使用 `-ads` 使用標記參數 `scan` 命令以遞迴方式掃描整個 SMB 共用區、並列出所有檔案及任何相關的替代資料流。

## 語法

```
xcp scan -ads \\<source_ip_address>\source_share\src
```

## 顯示範例

```
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
```

## 複本

◦ copy 命令會掃描整個來源目錄結構、並將其複製到目的地 SMB 共用。◦ copy 命令需要來源和目的地路徑做為變數。掃描和複製的檔案、處理量/速度和經過時間等詳細資料、每五秒會列印一次到主控台。



- 執行階段記錄檔儲存在「C:\NetApp\XCP」下。
- 這 copy 命令會在沒有存取控制清單（ACL）的情況下複製資料。

## 語法

```
xcp copy \\<IP address or hostname of SMB server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

下表列出 copy 參數及其說明。

| 參數  | 說明   |
|---|--|
| <a href="#">copy -h</a> 、 <a href="#">--help</a>    | 顯示的詳細資訊 copy 命令。   |
| <a href="#">複本 -v</a>                               | 增加除錯的詳細度。  |
| <<smb_copy_parallel,複製平行 ; n>                       | 指定並行處理程序的數目（預設值：<cpu-count>）。  |
| <<smb_copy_match,複製 - 符合 ; 篩選器 >                    | 僅處理符合篩選條件的檔案和目錄（請參閱 xcp help - match 以取得詳細資料）。                                 |
| <<smb_copy_exclude,複製 - 排除 ; 篩選器 >                  | 僅排除篩選器中的檔案和目錄  |
| <a href="#">複製 - 保留 - atime</a>                     | 還原上次存取的來源日期。   |
| <a href="#">copy -acl</a>                           | 複製安全性資訊。   |
| <<smb_copy_acl,複製 - 容錯移轉使用者 ; 容錯移轉使用者 >             | 指定目標機器上的 Active Directory 使用者或本機（非網域）使用者、該使用者會收到本機（非網域）來源機器使用者的權限。例如、網域\系統管理員。 |
| <<smb_copy_acl,複製 -backback-group ; fallback_group> | 指定目標機器上的 Active Directory 群組或本機（非網域）群組、以接收本機（非網域）來源機器群組的權限。例如、網域\系統管理員。        |
| <a href="#">複製根目錄</a>                               | 複製根目錄的 ACL 。   |

| 參數                                      | 說明   |
|---|--|
| 複製 <code>-aclVerify { yes 、 no }</code> | 提供在複製 <code>-ACL</code> 作業期間跳過或包含 ACL 驗證的選項。 |
| 複製 <code>-no所有權</code>                  | 不複製所有權。                                      |
| 複製 <code>-BS</code>                     | 讀取 / 寫入區塊大小 (預設 : 1M )                       |
| [複製廣告]                                  | 將 NTFS 替代資料串流從來源 SMB 共用複製到目的地 SMB 共用。        |

## copy -h 、 --help

使用 `-h` 和 `--help` 的參數 `copy` 命令以顯示有關的詳細資訊 `copy` 命令

語法

```
xcp copy -help
```

## 顯示範例

```
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.
```

## 複本 -v

使用 -v 參數 copy 提供詳細除錯資訊的命令。

## 語法

```
xcp copy -v \\<IP address or hostname of SMB server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 複製平行 <n>

使用 `-parallel <n>` 參數 `copy` 命令可設定較高或較低數量的 XCP 並行處理程序。的預設值 `-parallel` 等於 CPU 數。



n 的最大值為 61。

## 語法

```
xcp copy -parallel <n> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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, 0 errors
Total Time : 2s
STATUS : PASSED
```

## 複製 - 比對 <filter>

使用 `-match <filter>` 參數 `copy` 命令、僅複製符合所傳遞之引數的資料。

### 語法

```
xcp copy -match <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 複製 - 排除 <filter>

使用 `-exclude <filter>` 參數 `copy` 僅複製排除資料的命令。

## 語法

```
xcp copy -exclude <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

在下列範例中、名稱中有字串「resync」的檔案和目錄已排除以供複製。

## 顯示範例

```
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
```

## 複製 - 保留 - atime

使用 `-preserve-atime` 參數 `copy` 命令、在 XCP 讀取檔案之前、將「atime」重設為原始值。

## 語法

```
xcp copy -preserve-atime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```



## 顯示範例

```
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>

使用 `-acl` 參數 `copy` 用於啟動安全性描述元 (ACL) 傳輸的命令。

使用 `-acl` 參數 `-fallback-user` 和 `-fallback-group` 用於在目標機器或 Active Directory 上指定使用者和群組的選項、以接收本機 (非網域) 來源機器使用者或群組的權限。這並不表示來自 Active Directory 的不相符使用者。

### 語法

```
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
```

## 複製 -aclVerify { yes 、 no }

使用 `-aclverify {yes,no}` 參數 `copy` 命令提供在 ACL 複製作業期間跳過或包含 ACL 驗證的選項。

您必須使用 `-aclverify {yes,no}` 參數 `copy -acl` 命令。根據預設，ACL 複製作業會驗證 ACL。如果您設定 `-aclverify` 選項 `no`，您可以跳過 ACL 驗證和 `fallback-user` 和 `fallback-group` 不需要選項。如果您已設定 `-aclverify` 至 `yes`、需要 `fallback-user` 和 `fallback-group` 選項、如下列範例所示。

### 語法

```
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
```

## 顯示範例

```
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
```

## 複製根目錄

使用 `-root` 參數 `copy` 用於複製根目錄 ACL 的命令。

### 語法

```
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
```

## 顯示範例

```
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
```

## copy -no所有權

使用 `-noownership` 參數 `copy` 命令、指定不將所有權從來源複製到目的地。您必須使用 `-noownership` 使用 `-acl` 選項、而且需要 `fallback-user` 和 `fallback-group` 做為必要參數。

## 語法

```
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
```

## 顯示範例

```
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
```

## Copy -BS <n>

使用 `-bs <n>` 參數 `copy` 提供讀寫區塊大小的命令。預設值為 1M。

### 語法

```
xcp.exe copy -bs <n> \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 複製廣告

使用 `-ads` 參數 `copy` 命令將 NTFS 替代資料串流從來源 SMB 共用複製到目的地 SMB 共用。

### 語法

```
xcp copy -ads \\<IP address or hostname of SMB server>\source_share \\<IP address of SMB destination server>\dest_share
```

### 顯示範例

```
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
```

# 同步

◦ `sync` 命令會平行掃描來源和目標共用的變更和修改、並將適當的動作套用至目標、以確保目標與來源相同。◦ `sync` 命令會比較資料內容、時間戳記、檔案屬性、擁有權和安全性資訊。

## 語法

```
xcp sync \\<source SMB share> \\<IP address of SMB destination server>
```

## 顯示範例

```
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
```

下表列出 `sync` 參數及其說明。

| 參數   | 說明  |
|--|---|
| <a href="#">同步 -h</a> 、 <a href="#">--help</a>                             | 顯示此說明訊息並結束。   |
| <a href="#">同步 -v</a>  | 增加除錯的詳細度。   |
| << <a href="#">smb_sync_parallel</a> , <a href="#">同步 -parallel</a> ; n>   | 並行處理程序數（預設值： <cpu-count> ）。                                 |
| << <a href="#">smb_sync_match</a> , <a href="#">同步 -Match</a> （匹配） ; 篩選器 > | 僅處理符合篩選條件的檔案和目錄（請參閱 <code>xcp help - match</code> 以取得詳細資料）。 |
| << <a href="#">smb_sync_exclude</a> , <a href="#">同步 - 排除</a> ; 篩選器 >      | 僅排除篩選器中的檔案和目錄。  |
| <a href="#">同步 -preserve-atime</a>   | 在來源上還原上次存取的日期。  |
| <a href="#">同步 -noatime</a>  | 請勿檢查檔案存取時間。   |
| <a href="#">同步處理 - 夜間作業</a>  | 請勿檢查檔案建立時間。   |
| <a href="#">同步 -nomtime</a>  | 請勿檢查檔案修改時間。（此選項已過時。同步將繼續執行、但不使用此選項。）                        |
| <a href="#">Sync -noatt/s</a>  | 請勿檢查屬性。   |
| <a href="#">同步 -nodison</a>  | 請勿檢查所有權。  |

| 參數  | 說明   |
|---|--|
| <<sync_smb_atime,同步 -atimeWindow ;浮點 >                | 可接受的存取時間差異、以秒為單位。  |
| 同步 -ctimeWindow                                       | 可接受的建立時間差異、以秒為單位。  |
| 同步 -mtimeWindow                                       | 可接受的修改時間差異（以秒為單位）、   |
| SYNC -ACL   | 複製安全資訊。  |
| <<sync_smb_acl,同步 -backbackback-user ; fallback_user> | 目標機器上的 Active Directory 使用者或本機（非網域）使用者、可接收本機（非網域）來源機器使用者的權限（例如：網域\系統管理員）。      |
| <<sync_smb_acl,同步 -backback-group ; fallback_group>   | 目標機器上的 Active Directory 群組或本機（非網域）群組、可接收本機（非網域）來源機器群組的權限（例如：網域\系統管理員）。         |
| 同步 -l   | 增加輸出細節。  |
| Sync -root  | 同步根目錄的 ACL 。   |
| 僅同步   | 僅複製安全性資訊。  |
| 同步 -aclVERIFY {yes 、 no }                             | 在 ACL 同步作業期間、提供包含或略過 ACL 驗證的選項。  |
| <<smb_sync_bs,同步 -BS () ; n>                          | 讀取 / 寫入區塊大小（預設： 1M ）。  |
| [同步處理廣告]  | 使用 sync 命令 -ads 用於掃描來源和目標 SMB 共用區中替代資料流變更和修改的旗標。如果有變更、則會將變更套用至目標<br>確定目標與來源相同。 |

## 同步 -h 、 --help

使用 -h 和 --help 的參數 sync 命令以顯示有關的詳細資訊 sync 命令

語法

```
xcp sync --help
```

## 顯示範例

```
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
```

## 同步 -v

使用 -v 參數 sync 提供詳細除錯資訊的命令。

### 語法

```
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
```

## 顯示範例

```
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\pki.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 31bf3856ad364e35\pki.psd1'
ERROR failed to remove from target
"assembly\GAC_64\Microsoft.GroupPolicy.AdmTmplEditor\v4.0_6.3.0.0
31bf3856ad364e35\Microsoft.GroupPolicy.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\Microsoft.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.Management.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\Microsoft.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.Compression.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.IdentityModel.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 b77a5c561934e089\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.DataVisualization.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 31bf3856ad364e35\System.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

```

## 同步平行 <n>

使用 `-parallel <n>` 參數 `sync` 命令可設定較高或較低數量的 XCP 並行處理程序。° `sync -parallel <n>` 命令會與並行處理程序數同步（預設值：`<cpu-count>`）。



n 的最大值為 61。

## 語法

```
xcp sync -parallel <n>> \\<IP address or hostname of SMB
server>\volxcp\\<IP address of SMB destination server>\xcp1_test1
```

## 顯示範例

```
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 <filter>

使用 `-match <filter>` 參數 `sync` 命令來掃描來源和目標樹狀結構、並僅比較符合篩選參數的檔案或目錄。如果有任何差異、命令會在目標上套用必要的動作、以保持同步。

## 語法

```
xcp sync -match <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 同步 - 排除 <filter>

使用 `-exclude <filter>` 參數 `sync` 命令僅排除篩選器中的檔案和目錄。

### 語法

```
xcp sync -exclude <filter> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

### 顯示範例

```
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
```

## 同步 -preserve-ctime

使用 `-preserve-ctime` 參數 `sync` 命令、在 XCP 讀取檔案之前、將「`ctime`」重設為原始值。

### 語法

```
xcp sync -preserve-ctime \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 同步 -noatime

使用 `-noatime` 參數 `sync` 將來源與目標之間的所有差異同步化的命令、不包括只有存取時間差異的檔案。

### 語法

```
xcp sync -noatime \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 同步處理 - 夜間作業

使用 `-noatime` 參數 `sync` 將來源與目標之間的所有差異同步化的命令、不包括只有建立時間差異的檔案。

## 語法

```
xcp sync -noctime \\<IP address or hostname of SMB server>\source_share  
\\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 同步 - nomtime

使用 `-nomtime` 參數 `sync` 將來源與目標之間的所有差異同步化的命令、不包括只有不同修改時間的檔案。（此選項已過時。◦ `sync` 命令將繼續執行而不使用此選項。◦）

## 語法

```
xcp sync -nomtime \\<IP address or hostname of SMB server>\source_share  
\\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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 -noatt/s

使用 `-noattrs` 參數 `sync` 將來源與目標之間的所有差異同步化的命令、不包括檔案屬性只有差異的檔案。XCP 只有在檔案內容不同時才會複製檔案（ACL 會傳輸）。

### 語法

```
xcp sync -noattrs \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 同步 -nodison

使用 `-noownership` 參數 `sync` 將來源與目標的所有差異同步化的命令、不包括只有所有權差異的檔案。



## 語法

```
xcp sync -noownership \\<IP address or hostname of SMB
server>\vol_SMB_source_XXXXXX \\<IP address of SMB destination
server>\vol_SMB_target_XXXXXX
```

## 顯示範例

```
>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
```

## 同步 **-atimeWindow <float>**

使用 `-atimewindow <float>` 參數 `sync` 命令，以秒為單位指定檔案從來源到目的地的可接受差異。如果 `atime` 的差異小於 `<value>`、則 XCP 不會將檔案回報為不同。

語法

```
xcp sync -atimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

在以下範例中、XCP 接受來源和目的地檔案之間最多 10 分鐘的 `atime` 差異、而且不會更新目標上的 `atime`。

顯示範例

```
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>**

使用 `-ctimewindow <float>` 參數 `sync` 命令，以秒為單位指定從來源到目的地的檔案之 `ctime` 的可接受差異。當 `ctime` 的差異小於 `<value>` 時、XCP 不會將檔案回報為不同。

語法

```
xcp sync -ctimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

在以下範例中、XCP 接受來源和目的地檔案之間最多 10 分鐘的 `atime` 差異、而且不會更新目標上的 `ctime`。

## 顯示範例

```
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
```

## 同步 -mtimeWindow <float>

使用 -mtimeWindow <float> 參數 sync 命令，以秒為單位指定從來源到目的地之檔案的 mtime 的可接受差異。當時時間差異小於 <value> 時、XCP 不會將檔案回報為不同。

### 語法

```
xcp sync -mtimeWindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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>

使用 `-acl`、`-fallback-user` 和 `-fallback-group` 的參數 `sync` 命令來比較來源和目標的資料和安全性資訊、並在目標上套用必要的動作。◦◦ `-fallback-user` 和 `-fallback-group` 選項是目標機器或 Active Directory 中接收本機（非網域）來源使用者或群組權限的使用者或群組。



您無法使用 `-acl` 選項、不含 `-fallback-user` 和 `-fallback-group` 選項：

### 語法

```
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
```

顯示範例

```
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

```

## 同步 -l

使用 `-l` 參數 `sync` 命令、針對 XCP 在目標上執行的所有動作、在標準輸出中提供詳細的記錄資訊。

語法

```
xcp sync -l \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

顯示範例

```

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

```

## Sync -root

使用 `-root` 參數 `sync` 用於同步根目錄 ACL 的命令。

## 語法

```
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
```

## 顯示範例

```
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
```

## 僅同步處理 - 容錯移轉使用者 <fallback\_user> - 容錯移轉群組 <fallback\_group>

使用 `-onlyacl`、`-fallback-user` 和 `-fallback-group` 的參數 `sync` 命令來比較來源與目標之間的安全性資訊、並在目標上套用必要的動作。◦ `-fallback-user` 和 `-fallback-group` 是目標機器或 Active Directory 中接收本機（非網域）來源使用者或群組權限的使用者或群組。



您無法使用 `-onlyacl` 不含的參數 `-fallback-user` 和 `-fallback-group` 選項：

## 語法

```
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
```

## 顯示範例

```
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
```



## 同步 **-acIVERIFY** { **yes** 、 **no** }

使用 `-aclverify{yes,no}` 參數 `sync` 命令，提供在 ACL 同步作業期間包含或略過 ACL 驗證的選項。此選項只能與搭配使用 `sync -acl` 和 `sync -onlyacl` 命令。ACL 同步預設會執行 ACL 驗證。如果您設定 `-aclverify` 選項 `no`，您可以跳過 ACL 驗證和 `fallback-user` 和 `fallback-group` 不需要選項。如果您已設定 `-aclverify` 至 `yes`，需要 `fallback-user` 和 `fallback-group` 選項，如下列範例所示。

### 語法

```
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
```

## 顯示範例

```
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
```

## 同步 **-BS <n>**

使用 `-bs <n>` 參數 `sync` 提供讀寫區塊大小的命令。預設大小為 1M。

### 語法

```
xcp.exe sync -bs <n> \\<IP address or hostname of SMB server>\source_share  
\\<IP address of SMB destination server>\dest_share
```

### 顯示範例

```
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
```

## 同步處理廣告

使用 `-ads` 參數 `sync` 用於掃描來源和目標 SMB 共用區中替代資料流的變更和修改的命令。如果有變更、則會將變更套用至目標、以確保目標與來源相同。

### 語法

```
xcp sync -ads \\<IP address or hostname of SMB server>\source_share \\<IP  
address of SMB destination server>\dest_share
```

顯示範例

```
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_address>\dest_share
```

```
13 scanned, 1 copied, 13 compared, 0 skipped, 0 removed, 0 errors, 1
ads copied
Total Time : 6m9s
STATUS : PASSED
```

## 驗證

◦ `verify` 命令會讀取及比較來源和目標共用、並提供不同之處的相關資訊。您可以使用 `verify` 命令、無論用於執行複製或同步作業的工具為何。

### 語法

```
xcp verify \\<IP address or hostname of SMB server>\source_share \\<IP
address of SMB destination server>\dest_share
```

### 顯示範例

```
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
```

下表列出 `verify` 參數及其說明。

| 參數  | 說明  |
|---|---|
| <code>驗證 -h</code> 、 <code>--help</code>                      | 顯示此說明訊息並結束。   |
| <code>驗證 -v</code>  | 增加除錯的詳細度。   |
| <code>&lt;&lt;smb_verify_parallel,驗證 -parallel ; n&gt;</code> | 並行處理程序數（預設值： <code>&lt;cpu-count&gt;</code> ）。              |
| <code>驗證 -MATCH</code>  | 僅處理符合篩選條件的檔案和目錄（請參閱 <code>xcp help - match</code> 以取得詳細資料）。 |
| <code>&lt;&lt;smb_verify_exclude,驗證 - 排除 ; 篩選器 &gt;</code>    | 僅排除篩選器中的檔案和目錄。  |

| 參數  | 說明  |
|---|---|
| 驗證 <code>-preserve-atime</code>   | 在來源上還原上次存取的日期。  |
| 驗證 <code>-nodata</code>   | 請勿檢查資料。   |
| 驗證 <code>-atime</code>  | 確認檔案存取時間。   |
| 驗證 <code>- 夜間作業</code>  | 請勿檢查檔案建立時間。   |
| 驗證 <code>- nomtime</code>   | 請勿檢查檔案修改時間。   |
| 驗證 <code>-noatt些</code>   | 請勿檢查屬性。   |
| 驗證 <code>-No所有權</code>  | 請勿檢查所有權。  |
| 驗證 <code>-ADS</code>  | 掃描來源和目標 SMB 共用區中的替代資料流變更和修改。如果有變更、則會將變更套用至目標確定目標與來源相同。                    |
| 驗證 <code>-noacls</code>   | 請勿檢查 ACL 。  |
| 驗證 <code>-atimeWindow</code>  | 可接受的存取時間差異、以秒為單位。   |
| 驗證 <code>-ctimeWindow</code>  | 可接受的建立時間差異、以秒為單位。   |
| 驗證 <code>-mtimeWindow</code>  | 可接受的修改時間差異（以秒為單位）、  |
| 驗證 <code>-stats</code>  | 平行掃描來源和目標樹狀結構、並比較樹狀結構統計資料。  |
| 驗證 <code>-l</code>  | 增加輸出細節。   |
| 驗證 <code>-ll</code>   | 增加輸出細節（git 差異格式）。   |
| <code>&lt;&lt;verify_smb_acl,驗證 -fallback-user ; fallback_user&gt;</code>   | 目標機器上的 Active Directory 使用者或本機（非網域）使用者、可接收本機（非網域）來源機器使用者的權限（例如：網域\系統管理員）。 |
| <code>&lt;&lt;verify_smb_acl,驗證 -fallback-group ; fallback_group&gt;</code> | 目標機器上的 Active Directory 群組或本機（非網域）群組、可接收本機（非網域）來源機器群組的權限（例如：網域\系統管理員）。    |
| 驗證 <code>-root</code>   | 同步根目錄的 ACL 。  |
| 驗證 <code>- 僅限</code>  | 僅複製安全性資訊。   |

## 驗證 `-h` 、 `--help`

使用 `-h` 和 `--help` 的參數 `verify` 命令以顯示有關的詳細資訊 `verify` 命令

語法

```
xcp verify -help
```

## 顯示範例

```
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 acs

```

-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 access 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

```

## 驗證 -v

使用 -v 參數 verify 提供詳細除錯資訊的命令。

### 語法

```
xcp verify -v \\<IP address of SMB source server>\source_share address of
SMB destination server>\dest_share
```

### 顯示範例

```

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

```

## 驗證平行 <n>

使用 -parallel <n> 參數 verify 命令可設定較高或較低數量的 XCP 並行處理程序。 verify -parallel <n> 命令會驗證並行處理程序的數目（預設值：<cpu-count>）。



n 的最大值為 61。



## 語法

```
xcp verify -v -parallel <n> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 <filter> 是否相符

使用 `-match <filter>` 參數 `verify` 命令來掃描來源和目標樹狀結構、並僅比較符合篩選參數的檔案或目錄。如果有任何差異、命令會在目標上套用必要的動作、以保持同步。

## 語法

```
xcp verify -v -match <filter> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 - 排除 <filter>

使用 `-exclude <filter>` 參數 `verify` 命令僅排除篩選器中的檔案和目錄。

### 語法

```
xcp verify -exclude <filter> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 **-preserve-atime**

使用 `-preserve-atime` 參數 `verify` 重設命令 `atime` 到 XCP 讀取檔案之前的原始值。

### 語法

```
xcp verify -preserve-atime \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 -nodata

使用 -nodata 參數 verify 不比較資料的命令。

### 語法

```
xcp verify -nodata \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 -atime

使用 `-atime` 參數 `verify` 用於比較來源與目的地之間的檔案存取時間戳記的命令。

### 語法

```
xcp verify -ll -atime \\<IP address of SMB source server>\source_share  
\\<IP address of SMB destination server>\dest_share
```

### 顯示範例

```
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
```

## 驗證 -noctime

使用 `-noctime` 參數 `verify` 命令、不比較來源與目的地之間的檔案建立時間戳記。

### 語法

```
xcp verify -noctime \\<IP address of SMB source server>\source_share \\<IP  
address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 - nomtime

使用 `-nomtime` 參數 `verify` 不比較來源與目的地之間檔案修改時間戳記的命令。

### 語法

```
xcp verify -nomtime \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 -noattrs

使用 `-noattrs` 參數 `verify` 不檢查屬性的命令。

## 語法

```
xcp verify -noattrs \\<IP address of SMB source server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 -No所有權

使用 -noownership 參數 verify 不檢查所有權的命令。

## 語法

```
xcp verify -noownership \\<IP address of SMB source server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 -ADS

使用 `-ads` 參數 `verify` 如果來源和目的地上有任何替代資料串流、則會讀取此命令、並顯示任何差異。

### 語法

```
xcp verify -ads \\<IP address or hostname of SMB server>\source_share
\\<IP address of SMB destination server>\dest_share
```



顯示範例

```
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
```

## 驗證 -noacIs

使用 -noacIs 參數 verify 不檢查 ACL 的命令。

語法

```
xcp verify -noacIs -noownership \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

顯示範例

```
c:\netapp\xcp>xcp verify -noacIs -noownership \\<IP address or hostname
of SMB server>\source_share \\<IP address of SMB destination
server>\dest_share
xcp verify -noacIs -noownership \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share

xcp verify -noacIs -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
```

## 驗證 -noacIs -nodisoon

使用 -noownership 參數 verify -noacIs 不檢查從來源到目的地的 ACL 或所有權。

語法

```
xcp verify -noacIs -noownership <source> <target>
```

## 驗證 **-atimeWindow <float>**

使用 `-atimewindow <float>` 參數 `verify` 命令、以秒為單位指定可接受的差異 `atime` 從來源到目的地的檔案。如果不同、XCP 不會將檔案回報為不同 `atime` 低於 `<value>`。◦ `verify - atimewindow` 命令只能搭配使用 `-atime` 旗標。

### 語法

```
xcp verify -atimewindow <float> \\<IP address of SMB source
server>\source_share \\<IP address of SMB destination server>\dest_share
```

### 顯示範例

```
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
```

## 驗證 **-ctimeWindow <float>**

使用 `-ctimewindow <float>` 參數 `verify` 命令、以秒為單位指定可接受的差異 `ctime` 從來源到目的地的檔案。XCP 不會在不同的情況下回報檔案不同 `ctime` 低於 `<value>`。◦

### 語法

```
xcp verify -ctimewindow <float> \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 **-mtimeWindow <float>**

使用 `-mtimewindow <float>` 參數 `verify` 命令、以秒為單位指定可接受的差異 `mtime` 從來源到目的地的檔案。XCP 不會在不同的情況下回報檔案不同 `mtime` 低於 `<value>`。

## 語法

```
xcp verify -mtimewindow <float> \\<IP address of SMB
sourceserver>\source_share \\<IP address of SMB destination
server>\dest_share
```

## 顯示範例

```
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
```

## 驗證 -stats

使用 `-stats` 參數 `verify` 用於掃描來源和目的地的命令、並列印樹狀結構統計報告、顯示兩個共用區之間的相似點或差異。

### 語法

```
xcp verify -stats \\<IP address or hostname of SMB server>\source_share  
\\<IP address of SMB destination server>\dest_share
```



```
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
```

## 驗證 -I

使用 `-l` 參數 `verify` 命令，列出來源和目的地上檔案與目錄之間的差異。

語法

```
xcp verify -l \\<IP address of SMB source server>\source_share \\<IP address of SMB destination server>\dest_share
```

在下列範例中、複製期間並未傳輸所有權資訊、您可以看到命令輸出的差異。

顯示範例

```
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
```

## 驗證 -ll

使用 `-ll` 參數 `verify` 命令列出檔案或目錄與來源和目標之間的詳細差異。格式類似 `git diff`。紅色值是來源的舊值、綠色值是目標的新值。

語法

```
xcp verify -ll \\<IP address of SMB source server>\source_share \\<IP address of SMB destination server>\dest_share
```



## 顯示範例

```
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
```

## VERIF-Fallback-user <fallback\_user> -Fallback-group <fallback\_group>

使用 `-fallback-user` 和 `-fallback-group` 的參數 `verify` 命令列出來源和目的地上檔案和目錄之間的 ACL 和擁有權差異。



如果您使用 `fallback-user` 和 `fallback-group` 若執行複本或同步作業、NetApp 建議您也使用 `fallback-user` 和 `fallback-group` 驗證作業的參數。

### 語法

```
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
```

## 驗證 -nodise-fallback-user <fallback\_user> -fallback-group <fallback\_group>

使用 `-noownership`, `-fallback-user` 和 `-fallback-group` 的參數 `verify` 命令列出 ACL 差異、並略過來源與目的地上檔案與目錄之間的所有權驗證。

### 語法

```
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
```

## 驗證 -noacis-fallback-user <fallback\_user> -fallback-group <fallback\_group>

使用 `-noacis`、`-fallback-user` 和 `-fallback-group` 的參數 `verify` 命令可略過 ACL 驗證、並驗證來源與目的地上檔案與目錄之間的所有權。

## 語法

```
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
```

## 驗證 **-root**

使用 **-root** 參數 `verify` 用於同步根目錄 ACL 的命令。

## 語法

```
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
```

## 顯示範例

```
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
```

## 驗證 **-lacl -fallback-user <fallback\_user> -fallback- group <fallback\_group>**

使用 **-onlyacl**、**-fallback-user** 和 **-fallback-group** 的參數 `verify` 僅比較來源與目的地之間的安全性資訊的命令。

## 語法

```
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
```

## 顯示範例

```
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
```

## 設定

- `configure` 命令會設定 SMB 系統、並連線到 PostgreSQL 資料庫執行的系統。

## 語法

```
xcp.exe configure
```

## 顯示範例

```
C:\NetApp\XCP>xcp.exe configure

Please choose the menu you want to start:
1. Configure xcp.ini file
0. Quit
```

## 傾聽

- `listen` 命令會讀取 XCP 二進位檔案並啟動 XCP 服務。

## 語法

```
xcp.exe listen
```

## 顯示範例

```
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
```

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