SMB命令参考

XCP

NetApp
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SMB命令参考

帮助

SMB `help` command显示命令列表、命令参数以及每个命令的简要问题描述。此命令对于XCP新手非常有用。

语法

```
xcp --help
```

显示示例

```
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
```

帮助**<command>**

将<command>与结合使用 `help` 显示指定<command>的示例和选项详细信息。

语法

```
xcp help <command>
```

以下示例输出显示了的详细信息、用法、参数和可选参数 sync 命令：

显示示例

显示示例

```
C:\Users\Administrator\Desktop\xcp>xcp help sync
usage: xcp sync [-h] [-v] [-parallel <n>] [-match <filter>] [-preserve-
atime]
[-noatime] [-noctime] [-nomtime] [-noattrs]
[-noownership] [-atimewindow <float>] [-ctimewindow <float>]
[-mtimewindow <float>] [-acl] [-fallback-user FALLBACK_USER]
[-fallback-group FALLBACK_GROUP] [-l]
source target
Note: ONTAP does not let a SMB client modify COMPRESSED or ENCRYPTED
attributes.
XCP sync will ignore these file attributes.
positional arguments:
source
target
optional arguments:
-h, --help              show this help message and exit
-v                      increase debug verbosity
-parallel <n>           number of concurrent processes (default: <cpu-
count>)
-match <filter>         only process files and directories that match the
filter
                        see `xcp help -match` for details)
-preserve-atime         restore last accessed date on source
-noatime                do not check file access time
-noctime                do not check file creation time
-nomtime                do not check file modification time
-noattrs                do not check attributes
-noownership            do not check ownership
-atimewindow <float>    acceptable access time difference in seconds
-ctimewindow <float>    acceptable creation time difference in seconds
-mtimewindow <float>    acceptable modification time difference in
seconds
-acl                    copy security information
-fallback-user FALLBACK_USER
                        a user on the target machine to receive the
permissions of local
(nondomain)source machine users (eg. domain\administrator)
-fallback-group         FALLBACK_GROUP
                        a group on the target machine to receive the
permissions oflocal
(non-domain) source machine groups (eg. domain\administrators)
-l                      increase output
-root                   sync acl for root directory
C:\Users\Administrator\Desktop\xcp>
```

显示

SMB `show` 命令用于查询一个或多个存储服务器的RPC服务和NFS导出。命令还会列出可用服务和导出、以及每个导出的已用容量和可用容量、后跟每个导出的根属性。

语法

。 `show` 命令需要导出的NFSv3系统的主机名或IP地址：

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

显示示例

```
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
```

下表列出了 show 参数及其问题描述。

参数	Description
show -v	使用IP地址或主机名输出有关SMB服务器的详细信息。
show -h、--help	显示有关如何使用命令的详细信息。

license

SMB `license` 命令可显示XCP许可证信息。

语法

```
xcp license
```

显示示例

```
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
```

激活

SMB `activate` 命令可激活XCP许可证。运行此命令之前、请确认许可证文件已下载并复制到XCP主机或客户端计算机的C：\NetApp\XCP目录中。许可证可以在任意数量的主机上激活。

语法

```
xcp activate
```

显示示例

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

扫描

SMB `scan` 命令以递归方式扫描整个SMB共享、并在结尾列出所有文件 `scan` 命令：

语法

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

显示示例

```
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
```

下表列出了 `scan` 参数及其问题描述。

参数	Description
scan -h、--help	显示有关如何使用scan命令的详细信息。

参数	Description
[扫描-v]	增加调试详细信息。
<<smb_scan_parallel,扫描-并行()；n	指定并发进程的数量(默认值：<cpu-count>)。
<<smb_scan_match_filter,扫描-匹配过滤器	仅处理与筛选器匹配的文件和目录。
<<smb_scan_exclude_filter,扫描-排除()；过滤器()；	仅在筛选器中排除文件和目录。
[扫描-保留-环境]	还原源上上次访问的日期。
<<smb_scan_depth,扫描深度()；n	将搜索深度限制为n个级别。
[扫描-stats.]	以树统计信息报告格式列出文件。
[扫描-html]	以树统计HTML报告格式列出文件。
[扫描.csv]	以树统计CSV报告格式列出文件。
[扫描-l]	以长列表输出格式列出文件。
[扫描所有权]	检索源上文件和目录的所有权信息 系统。
[扫描-du]	汇总每个目录(包括子目录)的空间使用量。
<<smb_scan_fmt,扫描-fmgt ()；表达式()；	根据Python表达式设置文件列表的格式(请参见 `xcp help -fmt` 有关详细信息、请参见)。
扫描-ADS	以递归方式扫描整个SMB共享、并列出所有文件和任何关联的备用数据流。

scan -h、--help

使用 `-h` 和 `--help` 参数 `scan` 命令以显示有关如何使用scan命令的详细信息。

语法

```
xcp scan --help
```

显示示例

```
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
```

扫描**-v**

使用 `-v` 参数 `scan` 命令提供详细的日志记录信息、以便在报告错误或警告时进行故障排除或调试。

语法

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

显示示例

```
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
```

扫描-并行**<n>**

使用 `-parallel <n>` 参数 `scan` 命令以设置更多或更少的XCP并发进程数。

> (i)　　n的最大值为61。

语法

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

显示示例

```
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
```

扫描-匹配**<filter>**

使用 `-match <filter>` 参数 `scan` 命令以仅处理与筛选器匹配的文件和目录。

语法

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

在以下示例中、 `scan -match` 扫描在一个月到一年之间发生更改的所有文件、并在控制台中针对找到的每个文件打印一行。系统将为每个文件返回其上次修改时间的ISO格式、可供用户读取的文件大小、文件类型及其相对路径。

显示示例

```
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
```

在以下示例中、 `scan -match` 列出了3个月以上未修改且大小大于4 MB的文件。

显示示例

```
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
```

以下两个示例中的第一个仅与目录匹配、格式设置会在变量"mty"、"relative path"和"depth"之间添加一个逗号。

第二个示例将同一输出重定向到"name.csv "。

显示示例

```
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
```

显示示例

```
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
```

以下示例将打印完整路径和原始路径 `mtime` 非目录的所有文件的值。。 `mtime` 值将填充为70个字符、以便于读取控制台报告。

显示示例

```
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
```

扫描-排除**<filter>**

使用 `-exclude <filter>` 使用 `scan` 用于根据筛选器中的模式排除目录和文件的命令。

语法

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

在以下示例中、 `scan -exclude` 排除在一个月到一年之间更改的任何文件、并为未排除的每个文件在控制台中打印一行。为每个文件打印的详细信息包括其上次修改时间的ISO格式、文件的可读大小、文件类型及其相对路径。

显示示例

```
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
```

在以下示例中、 `scan -exclude` 列出三个月以上未修改且大小大于5.5 KB的未排除文件。为每个文件打印的

详细信息包括其上次修改时间的ISO格式、文件的可读大小、文件类型及其相对路径。

显示示例

```
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
```

以下示例不包括目录。它列出了未排除的文件、其格式设置会在变量之间添加逗号 `mtime`，`relpath`，和
`depth`。

显示示例

```
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
```

以下示例将打印完整的文件路径和RAW `mtimevalue` 所有非目录文件的数量。。 `mtimevalue` 用70个字符填充、以便于读取控制台报告。

显示示例

```
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
```

扫描-保留-环境

使用 -preserve-atime 参数 scan 命令以还原源上所有文件的上次访问日期并重置 atime 到XCP读取文件之前的原始值。

扫描SMB共享时、如果存储系统配置为修改、则会修改文件的访问时间 atime 读取时)、因为XCP正在逐个读取文件。XCP从不更改 atime，它只会读取文件，从而触发更新 atime。

语法

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

显示示例

```
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
```

扫描深度**<n>**

使用 `-depth <n>` 参数 `scan` 命令以限制SMB共享内目录的搜索深度。

ⓘ | 。 `-depth` option用于指定XCP将文件扫描到子目录的深度。

语法

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

显示示例

```
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_Utils.pm
source_share\agnostic\LunCmds.pm
source_share\agnostic\ProtocolAccess.pm
source_share\agnostic\Qtree.pm
source_share\agnostic\Quota.pm
source_share\agnostic\RbacCmdFetcher.pm
source_share\agnostic\RbacCmdFetcher_ReadMe
source_share\agnostic\SFXOD.pm
source_share\agnostic\Snapmirror.pm
source_share\agnostic\VolEfficiency.pm
source_share\agnostic\flatfile.txt
source_share\agnostic
source_share

xcp scan -depth 2 \\<IP address or hostname of SMB server>\source_share
317 scanned, 0 matched, 0 errors
Total Time : 0s
STATUS : PASSED
```

扫描-stats.

使用 -stats 参数 scan 命令以树统计信息报告格式列出文件。

语法

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

显示示例

```
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
```

27

```
== 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
```

扫描-html

使用 `-html` 参数 `scan` 用于在HTML统计信息报告中列出文件的命令。

> ⓘ XCP报告(.csv、.html)与XCP二进制文件保存在同一位置。文件名的格式
> 为<xcp_process_id><time_stamp>．html。当XCP无法将安全标识符(SID)映射到所有者名称
> 时、它会使用SID中最后一个"–"后的最后几位数字来表示所有者。例如、当XCP无法将SID S-1-
> 5-21-1896871423-3211229150-3383017265-4854184映射到其所有者时、它使用4854184表示
> 所有者。

语法

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

显示示例

```
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


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


== Modified ==
  >1 year       >1 month      1-31 days      1-24 hrs      <1 hour
<15 mins    future       invalid
    11718          2961                                  3110
== Created ==
  >1 year      >1 month      1-31 days        1-24 hrs    <1 hour      <15
mins      future        invalid
                                                  1      17788
== Accessed ==
  >1 year      >1 month     1-31 days        1-24 hrs      <1 hour        <15
mins      future        invalid
                                                        14624
3165


Total count: 17789
Directories: 3152
Regular files: 14637
Symbolic links:
Junctions:
Special files:
Total space for regular files:147MiB
Total space for directories: 0
Total space used: 147MiB
Dedupe estimate: N/A
Sparse data: N/A
xcp scan -stats -html -preserve-atime -ownership \\<IP address or
hostname ofSMB
server>\source_share
17,789 scanned, 0 matched, 0errors
Total Time : 39s
STATUS : PASSED
```

扫描.csv

使用 `-csv` 参数 `scan` 用于在CSV树统计信息报告中列出文件的命令。

语法

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

显示示例

```
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
other
    5418         3738          1974          1197          630          336
1344


==  Number of files ==
    empty        <8KiB       8-64KiB     64KiB-1MiB    1-10MiB    10-100MiB
>100MiB
     168        11466           2709           294


== Space used ==
   empty        <8KiB       8-64KiB     64KiB-1MiB    1-10MiB    10-100MiB
>100MiB
     0         24.4MiB       55.3MiB       66.9MiB           0           0
```

```
0

==  Directory entries ==
    empty        1-10      10-100        100-1K      1K-10K        >10K
       42        2690         420


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


==   Modified ==
 >1 year   >1 month    1-31 days     1-24 hrs    <1 hour       <15 mins
future   invalid
      11718        2961                         3110


== Created ==
 >1 year   >1 month    1-31 days     1-24 hrs    <1 hour      <15 mins
future   invalid
                                                  17789


== Accessed ==
 >1 year   >1 month    1-31 days     1-24 hrs      <1 hour        <15 mins
future   invalid
                                                   15754          2035


Total count: 17789
Directories: 3152
Regular files: 14637 Symbolic links:
Junctions:
Special files:
Total space for regular files: 147MiB Total space for directories: 0
Total space used: 147MiB
Dedupe estimate: N/A Sparse data: N/A
xcp scan -stats -csv -preserve-atime -ownership \\<IP address or
hostname of SMB server>\source_share
17,789 scanned, 0 matched, 0 errors Total Time : 40s
STATUS : PASSED
```

扫描-l

使用 `-l` 参数 `scan` 命令以长列表输出格式列出文件。

语法

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

显示示例

```
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
```

扫描所有权

使用 `-ownership` 参数 `scan` 命令以检索文件的所有权信息。

ⓘ 您只能使用 `-ownership` 使用 `-l`， `-match`， `-fmt`或 `-stats` parameters

语法

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

显示示例

```
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
```

扫描-du

使用 `-du` 参数 `scan` 命令总结每个目录(包括子目录)的空间使用量。

语法

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

显示示例

```
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
```

扫描-f以及**<expression>**

使用 `-fmt <expression>` 参数 `scan` 用于根据定义的表达式设置文件列表格式的命令。

语法

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

显示示例

```
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
```

扫描-ADS

使用 `-ads` 带有的标志参数 `scan` 使用命令以递归方式扫描整个SMB共享、并列出所有文件和任何关联的备用数据流。

语法

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

显示示例

```
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
```

复制

。 copy 命令会扫描整个源目录结构并将其复制到目标SMB共享。。 copy 命令需要源路径和目标路径作为变量。扫描和复制的文件，吞吐量 / 速度和已用时间详细信息每五秒打印一次到控制台。

> ⓘ
> - 运行时日志文件存储在C：\NetApp\XCP下。
> - 这 `copy` 命令复制数据而不使用访问控制列表(ACL)。

语法

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

显示示例

```
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
```

下表列出了 `copy` 参数及其问题描述。

参数	Description
copy -h、--help	显示有关的详细信息 `copy` 命令：
copy -v	增加调试详细信息。
<<smb_copy_parallel,复制-并行(); n	指定并发进程的数量(默认值： <cpu-count>)。
<<smb_copy_match,复制-匹配(); 过滤器();	仅处理与筛选器匹配的文件和目录(请参见 `xcp help - match` 有关详细信息、请参见)。
<<smb_copy_exclude,复制-排除(); 过滤器();	仅在筛选器中排除文件和目录
copy -냃 묘-地	还原源上上次访问的日期。
copy -acl	复制安全信息。
<<smb_copy_acl,copy -fallback-user	指定目标计算机上接收本地(非域)源计算机用户权限的Active Directory用户或本地(非域)用户。例如、domain\administrator。
<<smb_copy_acl,copy -fallback-group	指定目标计算机上接收本地(非域)源计算机组权限的Active Directory组或本地(非域)组。例如、domain\administrators。
copy -root	复制根目录的ACL。
copy -aclverify{yes, no}	提供了一个选项、用于在复制-acl操作期间跳过或包括ACL验证。

参数	Description
copy -no所有权	不复制所有权。
<<smb_copy_bs,copy -BS ()；n	读/写块大小(默认值：1M)
copy -ADS	将源SMB共享中的NTFS备用数据流复制到目标SMB共享。

copy -h、--help

使用 -h 和 --help 参数 copy 命令以显示有关的详细信息 copy 命令

语法

```
xcp copy -help
```

显示示例

```
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.
```

copy -v

使用 -v 参数 copy 命令以提供详细的调试信息。

语法

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

显示示例

```
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
```

copy -par行并行<n>

使用 `-parallel <n>` 参数 `copy` 命令以设置更多或更少的XCP并发进程数。的默认值 `-parallel` 等于CPU
计数。

ⓘ   n的最大值为61。

语法

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

显示示例

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

copy -match <filter>

使用 `-match <filter>` 参数 `copy` 命令以仅复制与传递的参数匹配的数据。

语法

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

显示示例

```
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
```

copy -排除<filter>

使用 `-exclude <filter>` 参数 `copy` 命令以仅复制排除的数据。

语法

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

在以下示例中、已排除名称中包含字符串"resync"的文件和目录的副本。

显示示例

```
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
```

copy -꿃 듦-地

使用 `-preserve-atime` 参数 `copy` 命令将"adi"重置为原始值、然后XCP读取文件。

语法

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

```
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 -reallback-user <fallback_user>-reallback-group <fallback_group>

使用 `-acl` 参数 `copy` 命令以激活安全描述符(ACL)的传输。

使用 `-acl` 参数 `-fallback-user` 和 `-fallback-group` 用于在目标计算机上或从Active Directory指定用户和组以接收本地(非域)源计算机用户或组的权限的选项。这并不是指Active Directory中不匹配的用户。

语法

```
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
```

copy -aclverify{yes, no}

使用 `-aclverify {yes,no}` 参数 `copy` 命令、用于在ACL复制操作期间跳过或包含ACL验证。

您必须使用 `-aclverify {yes,no}` 参数 `copy -acl` 命令：默认情况下、ACL复制操作会验证ACL。如果您设置了 `-aclverify` 选项 `no`，则可以跳过ACL验证和 `fallback-user` 和 `fallback-group` 不需要选项。如果您设置了 `-aclverify` to `yes`，则需要 `fallback-user` 和 `fallback-group` 选项、如以下示例所示。

语法

```
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
```

显示示例

```
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
```

copy -root

使用 `-root` 参数 `copy` 命令以复制根目录的ACL。

语法

```
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
```

显示示例

```
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所有权

使用 `-noownership` 参数 `copy` 用于指定不将所有权从源复制到目标的命令。您必须使用 `-noownership` 使用 `-acl` 选件 `fallback-user` 和 `fallback-group` 作为必需参数。

语法

```
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
```

显示示例

```
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> 参数 copy 命令以提供读/写块大小。默认值为1M。

语法

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

显示示例

```
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
```

copy -ADS

使用 -ads 参数 copy 用于将NTFS备用数据流从源SMB共享复制到目标SMB共享的命令。

语法

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

显示示例

```
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` 命令可并行扫描源共享和目标共享中的更改和修改、并对目标应用相应的操作、以确保目标与源共享完全相同。。 `sync` 命令用于比较数据内容、时间戳、文件属性、所有权和安全信息。

语法

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

显示示例

```
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
```

下表列出了 `sync` 参数及其问题描述。

参数	Description
sync -h、--help	显示此帮助消息并退出。
sync -v	增加调试详细信息。
<<smb_sync_parallel,sync -并行(); n	并发进程数(默认值：<cpu-count>)。
<<smb_sync_match,同步-匹配过滤器	仅处理与筛选器匹配的文件和目录(请参见 `xcp help - match` 有关详细信息、请参见)。
<<smb_sync_exclude,同步-排除(); 过滤器();	仅在筛选器中排除文件和目录。
sync -保留-环境	还原源上上次访问的日期。
sync -no地me	请勿检查文件访问时间。
sync -noctime	请勿检查文件创建时间。
sync -nomtime	请勿检查文件修改时间。(此选项已弃用。如果没有此选项、Sync将继续运行。)
sync -noattrs	不检查属性。
sync -no所有权	请勿检查所有权。

参数	Description
<<sync_smb_atime,sync -atiewindow ()；浮点型()；	可接受的访问时间差(以秒为单位)。
<<sync_smb_ctime,sync -cdewindow ()；浮点型()；	可接受的创建时间差(以秒为单位)。
<<sync_smb_mtime,sync -mtiewindow ()；浮点型()；	可接受的修改时间差(以秒为单位)、
sync -acl	复制安全信息。
<<sync_smb_acl,sync -fallback-user	目标计算机上用于接收本地(非域)源计算机用户权限的Active Directory用户或本地(非域)用户(例如：domain\administrator)。
<<sync_smb_acl,sync -reallback-group	目标计算机上用于接收本地(非域)源计算机组(例如：domain\administrators)权限的Active Directory组或本地(非域)组。
sync -l	增加输出详细信息。
sync -root	同步根目录的ACL。
sync -onlyacl	仅复制安全信息。
sync -aclverify{yes, no}	在ACL同步操作期间提供一个选项来包括或跳过ACL验证。
<<smb_sync_bs,同步-BS	Read/Write blocksize (读/写块大小)(默认值：1M)。
sync -ADS	使用 sync 命令 -ads 此标志用于扫描源SMB共享和目标SMB共享中备用数据流的更改和修改。如果存在更改、则会将更改应用于的目标确保目标与源完全相同。

sync -h、--help

使用 -h 和 --help 参数 sync 命令以显示有关的详细信息 sync 命令

语法

```
xcp sync --help
```

显示示例

```
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
```

sync -v

使用 `-v` 参数 `sync` 命令以提供详细的调试信息。

语法

```
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
```

显示示例

```
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\p ki.psd1": [Errno 13] Access is denied:
'\\\\?\\UNC\\<IP address of SMB destination server>\\vol_SMB_tar
shil\\assembly\\GAC_32\\Microsoft.CertificateServices.PKIClient.Cmdlets
\\v4.0_6.3.0.0 31bf3856ad 364e35\\pki.psd1'
ERROR failed to remove from target
"assembly\GAC_64\Microsoft.GroupPolicy.AdmTmplEditor\v4.0_6.3.0.0
31bf3856ad364e35\Microsoft.Gro upPolicy.AdmTmplEditor.dll": [Errno 13]
Access is denied: '\\\\?\\UNC\\10.61.
\vol_SMB_target_xxxxxx\\assembly\\GAC_64\\Microsoft.GroupPolicy.AdmTmpl
Editor\\v4.0_6.3.0.0 31bf
3856ad364e35\\Microsoft.GroupPolicy.AdmTmplEditor.dll'
1,933 scanned, 1,361 compared, 2 errors, 0 skipped, 0 copied, 1,120
removed, 5s ERROR failed to remove from target
"assembly\GAC_64\System.Printing\v4.0_4.0.0.0
31bf3856ad364e35\System.Printing.dll": [Errno 13] Access is denied:
'\\\\?\\UNC\\<IP address of SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\
4\\System.Printing\\v4.0_4.0.0.0 31bf3856ad364e35\\System.Printing.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\Microsoft.PowerShell.Workflow.ServiceCore\v4.0_3.0.0
.0 31bf3856ad364e35\Micro soft.PowerShell.Workflow.ServiceCore.dll":
[Errno 13] Access is denied: '\\\\
\\<IP address of SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\\GAC_MSIL\\Microsoft.PowerShel
l.Workflow.ServiceCore\\v4
.0_3.0.0.0
31bf3856ad364e35\\Microsoft.PowerShell.Workflow.ServiceCore.dll' ERROR
failed to remove from target
"assembly\GAC_MSIL\Microsoft.RightsManagementServices.ServerManager.Dep
loymentPlugin\v4.0_6.3.0.0
31bf3856ad364e35\Microsoft.RightsManagementServices.ServerManager.Deplo
ymen n.dll": [Errno 13] Access is denied: '\\\\?\\UNC\\<IP address of
SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\\GAC_MSIL\\Microsoft.RightsMan
agementServices.ServerMana ger.DeploymentPlugin\\v4.0_6.3.0.0
31bf3856ad364e35\\Mic
.RightsManagementServices.ServerManager.DeploymentPlugin.dll'
ERROR failed to remove from target
```

```
"assembly\GAC_MSIL\Microsoft.WSMan.Management\v4.0_3.0.0.0
31bf3856ad364e35\Microsoft.WSMan.Mana gement.dll": [Errno 13] Access is
denied: '\\\\?\\UNC\\<IP address of SMB destination server>\\vol_SMB_
_xxxxxx\\assembly\\GAC_MSIL\\Microsoft.WSMan.Management\\v4.0_3.0.0.0
31bf3856ad364e35\\Microsof t.WSMan.Management.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\PresentationUI\v4.0_4.0.0.0
31bf3856ad364e35\PresentationUI.dll": [Errno 13] Access is denied:
'\\\\?\\UNC\\<IP address of SMB destination
server>\\vol_SMB_target_xxxxxx\\assembly\
SIL\\PresentationUI\\v4.0_4.0.0.0 31bf3856ad364e35\\PresentationUI.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\System.IO.Compression.FileSystem\v4.0_4.0.0.0
b77a5c561934e089\System.IO.Comp ression.FileSystem.dll": [Errno 13]
Access is denied: '\\\\?\\UNC\\10.61.71.5
_SMB_target_xxxxxx\\assembly\\GAC_MSIL\\System.IO.Compression.FileSyste
m\\v4.0_4.0.0.0 b77a5c561
934e089\\System.IO.Compression.FileSystem.dll'
ERROR failed to remove from target
"assembly\GAC_MSIL\System.IdentityModel.Selectors\v4.0_4.0.0.0
b77a5c561934e089\System.IdentityM odel.Selectors.dll": [Errno 13]
Access is denied: '\\\\?\\UNC\\<IP address of SMB destination
server>\\v
s_target_xxxxxx\\assembly\\GAC_MSIL\\System.IdentityModel.Selectors\\v4
.0_4.0.0.0 b77a5c561934e0 89\\System.IdentityModel.Selectors.dll'
2,747 scanned, 2,675 compared, 9 errors, 0 skipped, 0 copied, 2,624
removed, 10s ERROR failed to remove from target
"assembly\GAC_MSIL\System.Web.DataVisualization\v4.0_4.0.0.0
31bf3856ad364e35\System.Web.DataVis ualization.dll": [Errno 13] Access
is denied: '\\\\?\\UNC\\<IP address of SMB destination server>\\vol_c
rget_xxxxxx\\assembly\\GAC_MSIL\\System.Web.DataVisualization\\v4.0_4.0
.0.0 31bf3856ad364e35\\Sy stem.Web.DataVisualization.dll'
cp sync -v \\<IP address or hostname of SMB
server>\vol_SMB_source_xxxxxx\warning \\<IP address of SMB destination
server>\vol_SMB_target_xxxxxx
2,831 scanned, 0 copied, 2,831 compared, 0 removed, 10 errors Total
Time : 10s
STATUS : PASSED
```

sync -par行并行<n>

使用 -parallel <n> 参数 sync 命令以设置更多或更少的XCP并发进程数。。 sync -parallel <n> 命令
会与并发进程数同步(默认值： <cpu-count>)。

> (i)   n的最大值为61。

语法

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

显示示例

```
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> 参数 sync 命令以扫描源树和目标树、并仅比较与筛选器参数匹配的文件或目录。如果存在任何差异、该命令会对目标应用所需的操作、以使其保持同步。

语法

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

显示示例

```
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
```

Sync -排除**<filter>**

使用 `-exclude <filter>` 参数 `sync` 命令以仅排除筛选器中的文件和目录。

语法

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

显示示例

```
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
```

sync -保留-环境

使用 `-preserve-atime` 参数 `sync` 命令、用于在XCP读取文件之前将"adi"重置为原始值。

语法

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

显示示例

```
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
```

sync -no地me

使用 `-noatime` 参数 `sync` 命令将源中的所有差异同步到目标、但不包括访问时间有差异的文件。

语法

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

显示示例

```
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
```

sync -noctime

使用 `-noctime` 参数 `sync` 命令将源中的所有差异同步到目标、但不包括创建时间有差异的文件。

语法

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

显示示例

```
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
```

sync -nomtime

使用 -nomtime 参数 sync 命令将源中的所有差异同步到目标、但不包括修改时间只有差异的文件。(此选项已弃用。。 sync 如果没有此选项、命令将继续运行。)

语法

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

显示示例

```
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 -noatttrs

使用 `-noattrs` 参数 `sync` 命令将源中的所有差异同步到目标、但不包括仅在文件属性方面存在差异的文件。XCP仅在文件包含不同内容时才会复制该文件(传输ACL)。

语法

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

显示示例

```
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
```

sync -no所有权

使用 `-noownership` 参数 `sync` 命令将源的所有差异同步到目标、但不包括所有权差异的文件。

语法

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

显示示例

```
>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
```

sync -地 点对点**<float>**

使用 `-atimewindow <float>` 参数 `sync` 命令以指定文件从源到目标的可接受差值(以秒为单位)。如果时间差异小于<value>、则XCP不会将文件报告为不同。

语法

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

在以下示例中、XCP接受源文件和目标文件之间的最多10分钟时间差异、并且不会更新目标上的时间。

显示示例

```
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 -cdiewindow **<float>**

使用 `-ctimewindow <float>` 参数 `sync` 命令以指定文件从源到目标的可接受差异(以秒为单位)。当ctime的差异小于<value>时、XCP不会将文件报告为不同。

语法

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

在以下示例中、XCP接受源文件和目标文件之间长达10分钟的时间差、并且不会更新目标上的ctime。

显示示例

```
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
```

sync -mtiewindow <float>

使用 `-mtimewindow <float>` 参数 `sync` 命令以指定文件从源到目标的mtime的可接受差值(以秒为单位)。
当mtime的差异小于<value>时、XCP不会将文件报告为不同。

语法

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

显示示例

```
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 -reallback-user <fallback_user>-reallback-group <fallback_group>

使用 -acl， -fallback-user 和 -fallback-group 参数 sync 命令将源的数据和安全信息与目标进行比较、并对目标应用所需的操作。。 -fallback-user 和 -fallback-group 选项是指目标计算机或Active Directory中接收本地(非域)源用户或组权限的用户或组。

> ⓘ   您不能使用 -acl 选项 -fallback-user 和 -fallback-group 选项

语法

```
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
```

显示示例

```
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
```

sync -l

使用 -l 参数 sync 命令、用于在标准输出中提供XCP对目标执行的所有操作的详细日志记录信息。

语法

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

显示示例

```
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 参数 sync 命令以同步根目录的ACL。

语法

```
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
```

显示示例

```
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
```

sync -onlyacl-reallback-user <fallback_user>-reallback-group <fallback_group>

使用 `-onlyacl`， `-fallback-user`，和 `-fallback-group` 参数 sync 命令以比较源与目标之间的安全信息并对目标应用所需的操作。。 `-fallback-user` 和 `-fallback-group` 是目标计算机或Active Directory中接收本地(非域)源用户或组权限的用户或组。

ⓘ 您不能使用 `-onlyacl` 不带的参数 `-fallback-user` 和 `-fallback-group` 选项

语法

```
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
```

显示示例

```
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
```

sync -aclverify{yes, no}

使用 `-aclverify{yes,no}` 参数 `sync` 命令以提供在ACL同步操作期间包含或跳过ACL验证的选项。此选项只能与结合使用 `sync -acl` 和 `sync -onlyacl` 命令默认情况下、ACL同步会执行ACL验证。如果您设置了 `-aclverify` 选项 `no`，则可以跳过ACL验证和 `fallback-user` 和 `fallback-group` 不需要选项。如果您设置了 `-aclverify` to `yes`，则需要 `fallback-user` 和 `fallback-group` 选项、如以下示例所示。

语法

```
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
```

```
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
```

Sync -BS <n>

使用 `-bs <n>` 参数 `sync` 命令以提供读/写块大小。默认大小为1M。

语法

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

显示示例

```
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
```

sync -ADS

使用 ... `-ads` 参数 `sync` 用于扫描对源SMB共享和目标SMB共享中备用数据流所做的更改和修改的命令。如果发生更改、则会将更改应用于目标、以确保目标与源完全相同。

语法

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

显示示例

```
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_addess>\dest_share
```

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

验证

。 verify 命令读取并比较源共享和目标共享、并提供有关不同之处的信息。您可以使用
verify 命令、而不管用于执行复制或同步操作的工具如何。

语法

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

显示示例

```
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
```

下表列出了 verify 参数及其问题描述。

参数	Description
验证-h、--help	显示此帮助消息并退出。
[验证-v]	增加调试详细信息。
<<smb_verify_parallel,验证-并行(); n	并发进程数(默认值: <cpu-count>)。
<<smb_verify_match,验证-匹配过滤器	仅处理与筛选器匹配的文件和目录(请参见 xcp help - match 有关详细信息、请参见)。
<<smb_verify_exclude,验证-排除(); 过滤器();	仅在筛选器中排除文件和目录。

参数	Description
[验证-保留-数据]	还原源上上次访问的日期。
[验证-nobdata]	请勿检查数据。
验证-地 点	验证文件访问时间。
[验证-noctime]	请勿检查文件创建时间。
[验证-nomtime]	请勿检查文件修改时间。
[验证-noatts]	不检查属性。
[验证-no所有权]	请勿检查所有权。
验证-ADS	扫描源SMB共享和目标SMB共享中备用数据流的更改和修改。如果存在更改、则会将更改应用于的目标确保目标与源完全相同。
[验证-noacls]	请勿检查ACL。
<<verify_smb_atime,验证-atiewindow ();浮点();	可接受的访问时间差(以秒为单位)。
<<verify_smb_ctime,验证-ctimewindow ();浮点型();	可接受的创建时间差(以秒为单位)。
<<verify_smb_mtime,验证-mtmewindow ();浮点型();	可接受的修改时间差(以秒为单位)、
[验证-stats.]	并行扫描源树和目标树并比较树统计信息。
[验证-I]	增加输出详细信息。
[验证-II]	增加输出详细信息(git差异格式)。
<<verify_smb_acl,ver验-fallback-user	目标计算机上用于接收本地(非域)源计算机用户权限的Active Directory用户或本地(非域)用户(例如： domain\administrator)。
<<verify_smb_acl,ver验-fallback-group	目标计算机上用于接收本地(非域)源计算机组(例如： domain\administrators)权限的Active Directory组或本地(非域)组。
验证-root	同步根目录的ACL。
验证-onlyacl	仅复制安全信息。

验证-h、--help

使用 -h 和 --help 参数 verify 命令以显示有关的详细信息 verify 命令

语法

```
xcp verify –help
```

显示示例

```
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 acls
```

```
-noownership            do not check ownership
-onlyacl                 verify only acls
-noctime                do not check file creation time
-nomtime                do not check file modification time
-noattrs                do not check attributes
-atime              verify acess time as well
-atimewindow <float>   acceptable access time difference in seconds
-ctimewindow <float>   acceptable creation time difference in seconds
-mtimewindow <float>   acceptable modification time difference in
seconds
-ads                     verify ntfs alternate data stream
```

验证-v

使用 `-v` 参数 `verify` 命令以提供详细的调试信息。

语法

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

显示示例

```
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
```

验证-par并 口<n>

使用 `-parallel <n>` 参数 `verify` 命令以设置更多或更少的XCP并发进程数。。 `verify -parallel <n>` 命令用于验证并发进程的数量(默认值: <cpu-count>)。

ⓘ | n的最大值为61。

语法

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

显示示例

```
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
```

验证**-match <filter>**

使用 `-match <filter>` 参数 `verify` 命令以扫描源树和目标树、并仅比较与筛选器参数匹配的文件或目录。如果存在任何差异、该命令会对目标应用所需的操作、以使其保持同步。

语法

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

显示示例

```
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
```

验证-排除**<filter>**

使用 -exclude <filter> 参数 verify 命令以仅排除筛选器中的文件和目录。

语法

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

显示示例

```
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
```

验证-保留-数据

使用 `-preserve-atime` 参数 `verify` 命令进行重置 `atime` 到XCP读取文件之前的原始值。

语法

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

显示示例

```
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
```

验证**-nobdata**

使用 `-nodata` 参数 `verify` 命令不比较数据。

语法

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

显示示例

```
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
```

验证-地 点

使用 `-atime` 参数 `verify` 命令、用于比较源与目标之间的文件访问时间戳。

语法

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

显示示例

```
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
```

验证-noctime

使用 `-noctime` 参数 `verify` 命令、用于不比较源与目标之间的文件创建时间戳。

语法

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

显示示例

```
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
```

验证**-nomtime**

使用 `-nomtime` 参数 `verify` 用于不比较源与目标之间的文件修改时间戳的命令。

语法

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

显示示例

```
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
```

验证**-noatts**

使用 `-noattrs` 参数 `verify` 命令不检查属性。

语法

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

显示示例

```
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
```

验证**-no**所有权

使用 `-noownership` 参数 `verify` 命令不检查所有权。

语法

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

显示示例

```
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
```

验证-ADS

使用 -ads 参数 verify 此命令用于读取源和目标上是否存在任何备用数据流、并显示任何差异。

语法

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

显示示例

```
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
```

验证-noacls

使用 `-noacls` 参数 `verify` 命令不检查ACL。

语法

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

显示示例

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

xcp verify -noacls -noownership \\<IP address or hostname of SMB
server>\source_share \\<IP address of SMB destination
server>\dest_share
318 scanned, 317 compared, 317 same, 0 different, 0 missing, 0 errors
Total Time : 1s
STATUS : PASSED
```

验证-noacls -no所有权

使用 `-noownership` 带的参数 `verify -noacls` 不检查从源到目标的ACL或所有权。

语法

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

验证-地 点对点**<float>**

使用 -atimewindow <float> 参数 verify 命令以指定的可接受差值(以秒为单位) atime 从源到目标的文件。如果中存在差异、则XCP不会将文件报告为不同 atime 小于<value>。。 verify - atimewindow 命令只能与结合使用 -atime 标志。

语法

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

显示示例

```
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
```

验证**-ctimewindow <float>**

使用 -ctimewindow <float> 参数 verify 命令以指定的可接受差值(以秒为单位) ctime 从源到目标的文件。当中存在差异时、XCP不会将文件报告为不同 ctime 小于<value>。

语法

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

显示示例

```
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
```

验证-mtiewindow <float>

使用 `-mtimewindow <float>` 参数 `verify` 命令以指定的可接受差值(以秒为单位) `mtime` 从源到目标的文件。当中存在差异时、XCP不会将文件报告为不同 `mtime` 小于<value>。

语法

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

显示示例

```
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
```

验证-stats.

使用 -stats 参数 verify 命令扫描源和目标、并打印显示两个共享之间相似或不同之处的树统计信息报告。

语法

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

显示示例

显示示例

```
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
```

验证-I

使用 `-l` 参数 `verify` 命令列出源和目标上的文件和目录之间的差异。

语法

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

在以下示例中、复制期间未传输所有权信息、您可以在命令输出中看到这些差异。

显示示例

```
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
```

验证-II

使用 `-ll` 参数 `verify` 命令、列出文件或目录与源和目标之间的详细差异。格式类似于git比较。红色值是来自源的旧值、绿色值是来自目标的新值。

语法

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

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

xcp verify -ll \\<IP address of SMB source server>\source_share \\<IP
address of SMB destination server>\dest_share
374 scanned, 373 compared, 373 same, 0 different, 0 missing, 0 errors
Total Time : 3s
STATUS : PASSED
```

verify-fallback-user <fallback_user>-fallback-group <fallback_group>

使用 `-fallback-user` 和 `-fallback-group` 参数 `verify` 命令列出源和目标上的文件和目录之间的ACL和所有权差异。

> ⓘ　如果您使用 `fallback-user` 和 `fallback-group` 对于复制或同步操作、NetApp建议您也使用 `fallback-user` 和 `fallback-group` 参数与验证操作。

语法

```
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
```

验证-no所有权-reallback-user <fallback_user>-reallback-group <fallback_group>

使用 `-noownership`, `-fallback-user`，和 `-fallback-group` 参数 `verify` 命令列出ACL差异并跳过源和目标上的文件和目录之间的所有权验证。

语法

```
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
```

验证-noacls-reallback-user <fallback_user>-reallback-group <fallback_group>

使用 `-noacls`, `-fallback-user`，和 `-fallback-group` 参数 `verify` 命令以跳过ACL验证并验证源和目标上的文件和目录之间的所有权。

```
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
```

验证**-root**

使用 `-root` 参数 `verify` 命令以同步根目录的ACL。

语法

```
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
```

显示示例

```
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
```

验证-onlyacl -reallback-user <fallback_user>-reallback- group <fallback_group>

使用 `-onlyacl`, `-fallback-user` 和 `-fallback-group` 参数 `verify` 命令仅比较源和目标之间的安全信息。

语法

```
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
```

```
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
```

配置

◦ `configure` 命令用于配置SMB系统并连接到运行PostgreSQL数据库的系统。

语法

```
xcp.exe configure
```

显示示例

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

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

倾听

◦ `listen` 命令读取XCP二进制文件并启动XCP服务。

语法

```
xcp.exe listen
```

显示示例

```
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
```