Troubleshoot

XCP

NetApp
March 14, 2024

Table of Contents

Troubleshoot

Troubleshoot XCP NFS errors

Review the solutions to troubleshoot your issue.

XCP issues and solutions

XCP issue	Solution
`xcp: ERROR:` compare batches: Incompatible index file. Please use the index file generated with the current version of XCP only. Alternatively, you can download an older XCP binary from xcp.netapp.com.	You are trying to perform operations on an index that was generated using an XCP version older than XCP 1.9. This is not supported. It is recommended to complete any in-progress migrations and then switch to this version of XCP. Alternatively, you can re-run the `scan`, `copy` or `verify` commands to generate a new index with XCP 1.9.
`xcp: ERROR:` must run as root	Execute XCP commands as root user
`xcp: ERROR:` License file `/opt/NetApp/xFiles/xcp/license` not found.	Download the license from the XCP site, copy it to `/opt/NetApp/xFiles/xcp/`, and activate it by running the `xcp activate` command.
`xcp: ERROR:` This license has expired	Renew or obtain the new XCP license from the XCP site.
`xcp: ERROR:` License unreadable	License file might be corrupted. Obtain the new XCP license from the XCP site.
`xcp: ERROR:` XCP not activated, run 'activate' first	Run the `xcp activate` command
This copy is not licensed	Obtain the appropriate XCP license file. Copy the XCP license to the `/opt/NetApp/xFiles/xcp/` directory on the XCP server. Run the `xcp activate` command to activate the license.
`xcp: ERROR:` Failed to activate license: Server unreachable	You are trying to activate the online license and your host system is not connected to the internet. Make sure your system is connected to the internet.
`xcp: ERROR:` Failed to activate license: Server xcp.netapp.com unreachable `xcp: HINT:` Configure DNS on this host or return to the license page to request a private license Expected error: Failed to activate license: Server xcp.netapp.com unreachable	Make sure xcp.netapp.com is reachable from your host or request for the offline license

XCP issue	Solution

`xcp: ERROR:` Catalog inaccessible: Cannot mount `nfs_server:/export[:subdirectory]`	Open the editor on the XCP Linux client host and update the configuration file with the proper catalog location. The XCP configuration file is located at `/opt/NetApp/xFiles/xcp/xcp.ini`. Sample entries of configuration file:
	
	`[root@scspr1949387001 ~]# cat /opt/NetApp/xFiles/xcp/xcp.ini`
	`[xcp]`
	`catalog = 10.235.128.153:/catalog`

`nfs3 error 2:` no such file or directory	Operation did not find the source file(s) on the target NFS export. Run the `xcp sync` command to copy the incremental updates from source to destination
`xcp: ERROR:` Empty or invalid index	Previous copy operation was interrupted before the index file was created. Rerun the same command with the new index and when the command is executing, verify that the keyword "indexed" is displayed in the stats.
`xcp: ERROR:` compare batches: child process failed `(exit code -9): recv <type 'exceptions.EOFError'>`	Follow the instructions in the following KB article: Cannot allocate memory when synching NFS data
`xcp: ERROR:` For xcp to process ACLs, please mount `<path>` using the OS nfs4 client	Mount the source and target on the XCP host using NFSv4, for example, `mount -o vers=4.0 10.10.10.10:/source_vol /mnt/source`
The XCP `verify` command fails during a migration. The STATUS shows as FAILED. (Live)	The XCP `verify` command was run when the source was live. Run the XCP `verify` command after the final cutover.
The XCP `verify` command fails after a cutover. (Live)	The XCP cutover sync operation might not have copied all the data. Rerun the XCP `sync` command followed by the `verify` command after the final cutover. If the problem persists, contact technical support.
The XCP `sync` command fails (this applies to all sync failures during migrations). (Live)	XCP is not able to read the data, this might be due to an XCP issue. Check the XCP STATUS message after the command operation completes. Rerun the `sync` command. If the sync operation fails again, contact technical support.
The XCP `copy`, `resume`, and `sync` commands fail due to insufficient memory. XCP crashes and the XCP status shows as FAILED. (Live)	There is low available memory on the host or there has been a huge incremental change. Follow the instructions in the following KB article: Cannot allocate memory when synching NFS data
`mnt3 error 13:` permission denied	As a non-root user, you do not have the correct permissions to access the file system. Check if you can access the file system and perform read write operations.

XCP issue	Solution
`xcp: batch 1: ERROR: [Errno 13] Permission denied:`	As a non-root user, you do not have the correct permissions to access the file system. Check if you can access the file system and perform read write operations.
`mxcp: ERROR: OSMounter 'file:///t/ 10.234.115.215_src_vol/DIR': [Errno 2] No such file or directory`	The path `/t/10.234.115.215_src_vol/ DIR` is not mounted on the Linux file system. Check if the path exists.
`ERROR: run sync {-id: 'xcp_index_1624263869.3734858'}: sync not yet available for hdfs/ posix/s3fs sources and targets -workaround is copy with a match filter for recent mods`	The `sync` command is not supported in XCP for the POSIX and HDFS connectors.
The `xcp verify` command fails with different mod time	You can identify the file and manually copy the file to the destination.
`Non dir object copy/sync can not be resumed; try copy again.` `For more details please refer XCP user guide.`	Because you cannot resume a single file, it is recommended to run the `xcp copy` command again for the file. Any change in the file leads to a complete copy of the file. As a result, performance is not affected.
`Non dir object can not be synced; try copy again.` `For more details please refer XCP user guide.`	Because you cannot sync a single file, it is recommended to run the `xcp copy` command again for the file. Any change in the file leads to a complete copy of the file. As a result, performance is not affected.
`xcp: ERROR: batch 4: Could not connect to node:`	Verify that the node given in the —nodes parameter is reachable. Try connecting by using Secure Shell (SSH) from the master node
`[Error 13] permission denied`	Check if you have permission to write on the destination volume.
`xcp: ERROR: batch 2: child process failed (exit code -6): recv <type 'exceptions.EOFError'>:`	Increase your system memory and rerun the test.
`xcp:ERROR: invalid path 'IP:/users009/user1/2022-07-01_04:36:52_1489367`	If there is one or more colons in the NFS server share path name, use a double colon (::) instead of a single colon (:) to separate the NFS server IP and NFS server share path.

XCP issue	Solution

The SnapLock volume does not retain the WORM files after an `xcp copy` operation.	XCP copies the WORM files to the volume successfully but the files are not retained by the SnapLock volume.
	
	1. Perform the `xcp copy` operation from the source to the destination volume:
	`xcp copy src_server:/src_export dst_server:/dst_export`
	
	2. Use the `xcp chmod` command to change the file permissions on the destination volume to **readonly**:
	`xcp chmod -mode a-w dst_server:/dst_export`
	
	When the above steps are complete, the SnapLock volume starts retaining the copied files.
	
	ⓘ The retention time of a SnapLock volume is governed by the volume's default retention policy. Check the volume retention settings before starting migration: Set the retention time

Logdump

If you encounter an issue with an XCP command or job, the `logdump` command enables you to dump log files related to the issue into a `.zip` file that can be sent to NetApp for debugging. The `logdump` command filters logs based on the migration ID or job ID and dumps those logs into a `.zip` file in the current directory. The `.zip` file has the same name as the migration or job ID that is used with the command.

Example

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

ⓘ After migration, if you use the `XCP_CONFIG_DIR` or `XCP_LOG_DIR` environment variables to override the default config location or log location, the `logdump` command fails when used with an old migration or job ID. To avoid this, use the same logpath until migration completes.

Troubleshoot XCP SMB errors

Review the solutions to troubleshoot your issue.

Issue	Solution
XCP commands do not show the expected results when a junction path is used in the source or destination.	Use an SMB share path instead of a junction path when running XCP commands.

A traceback error might occur if the source, destination, or both is a junction with no directories and an online license is used in migration. If this occurs, the XCP command status is `PASSED` but the following error is returned at the end of the console output:
 	
``Error in atexit._run_exitfuncs:
Traceback (most recent call last):
  File "xcp\stats.py", line 214,
in call_home
  File "xcp\histograms.py", line
387, in calculate_averages
ZeroDivisionError: division by
zero```
	Use an offline license instead of an online license.

`xcp: ERROR`: This license has expired	Renew or obtain the new XCP license from the XCP site.
This copy is not licensed	Obtain the appropriate XCP license file. Copy the XCP license to the `c:\netapp\xcp` folder on the XCP host. Run the `xcp activate` command to activate the license
`xcp: ERROR`: XCP not activated, run 'activate' first	Download the XCP license from the XCP site. Copy the file on the XCP Linux client host at `c:\netapp\xcp` on the XCP host. Run the `xcp activate` command to activate the license.
`xcp: ERROR`: License file C:\NetApp\XCP\license not found	Register for the XCP license on the XCP site. Download and copy the license file to `C:\NetApp\XCP\` on the XCP Windows client host.
xcp scan Error: The network name cannot be found	Rerun the command with correct share name
xcp copy Error: ERROR failed to obtain fallback security principal Error message logged in xcp.log file: `pywintypes.error: (1722, 'LookupAccountName', 'The RPC server is unavailable.')`	Add the destination box in the hosts file (`C:\Windows\System32\drivers\etc\hosts`). Netapp storage destination box entry must be in the below format: `<data vserver data interface ip>` 1 or more white spaces `<cifs server name>`

Issue	Solution
`xcp copy: ERROR` failed to obtain fallback security principal (Post adding destination box entry in the hosts files) Error messaged logged in xcp.log file: `'No mapping between account names and security IDs was done'`	The fallback user/group does not exist at the target system (destination box) or active directory. Rerun the command with correct fallback user/group options
`xcp copy: ERROR` failed to obtain fallback security principal (Post adding destination box entry in the hosts files) Error messaged logged in xcp.log file: `pywintypes.error: (87, 'LookupAccountName', 'The parameter is incorrect.')`	Incorrect parameter for fallback user/group option. Rerun the command with the correct syntax for fallback user/group options
`xcp copy` with ACL migration Error message logged in xcp.log file: `pywintypes.error: (1314, 'GetNamedSecurityInfo', 'A required privilege is not held by the client.')`	An issue related to security descriptors because the migration user account only has the required privileges for XCP to retrieve owner, group, and DACL. It cannot retrieve SACL. Add your migration user account to the "Manage Audit and Security Log" policy in your Active Directory. Reference: Manage auditing and security log

Troubleshoot XCP File Analytics errors

Review the solutions to troubleshoot your issue.

Issue	Solution

PostgreSQL service failed	Run configure again and select the installation option. If the previous installation was successful, you can select the repair option. If you are still getting the error, try manual steps as follows:
	
	1. Restart the PostgreSQL service:
	
	`sudo systemctl restart postgresql.service`
	
	2. Check the service status:
	
	`sudo systemctl status postgresql.service | grep Active`

Issue	Solution

HTTPD service failed	Run configure again and select the installation option. If the previous installation was successful, you can select the repair option. If you are still getting the error, try manual steps as follows:
	
	1. Restart the HTTPD services:
	
	`sudo systemctl restart httpd`
	
	2. Check the HTTPD service status:
	
	`sudo systemctl status httpd | grep Active`

Not able to open login page after successful install	Verify that your system can ping the Linux machine where XCP File Analytics is installed and HTTPD is running. If the services are not running, run `configure` and choose the repair option. Verify that you are using a supported browser version. See the IMT.
User login failed	• Verify that you are using a supported browser version. See the IMT. • Verify that the user is "admin" and the password is correct. • Verify that the XCP service is running by issuing `xcp service status`. • Verify that port 5030 is open on Linux. Open the application at **https:// <linux ip> :5030/api/xcp**, and confirm that the messagereads msg: `Missing Authorization Header`. • Check whether the `xcp.ini` file is present in the `/opt/NetApp/xFiles/xcp/` location. To reset the `xcp.ini` file, run the configuration script and select the **Repair** option. Next, select the menu option to **rebuild xcp.ini file**. • Manually run the `xcp --listen` command on the CLI and try logging in. If you do not receive a request on the server, re-check the installation and the ports used for communication with the server. After you verify that the installation is correct, run the `service xcp start` command to restart the service.
XCP GUI is not showing updated pages	Clear the cache and try again
XCP service is not starting	To run the `xcp` service, use the `sudo systemctl start xcp` command. Alternatively, run the configuration script and select the **Repair** option to start the services that are stopped.

Issue	Solution
Failed to scan file share	File share/volume might not be readable. Check manually whether the file share is accessible/readable by running the `xcp show` command. Also, check if the `xcp.ini` file is deleted. If it is deleted, rebuild the `xcp.ini` file by using the configure.sh script repair option.
Could not load file servers	Try a page refresh. If the problem persists, manually run the `xcp show` command on the prompt and check whether you can scan the file server. If successful, raise a ticket with NetApp customer support. If unsuccessful, check if the file server is active by performing a manual check. Check whether the `xcp.ini` file and license files are in the correct location. To reset the `xcp.ini` file, run the configuration script and select the **Repair** option. Next, select the menu option to **rebuild xcp.ini file.** Check the `xcpfalogs` logs to see if the license needs renewal.
XCP File Analytics page is not displayed after system reboot	XCP services might be down. Run the configuration script and select the option to **Repair**. This will restart all the services that are stopped.
The total space for an exported file system on a given file server might show more space compared to the allocated physical storage.	This can happen when there are qtree level exports inside the volume. For example, if the volume size that is exported as `/vol1` is 10 GB and there is a qtree inside the volume `/vol1/qtree1`, then the `xcp show` command will show the `vol1` size as `10 GB` and the `qtree1` size as `10 GB`. XCP File Analytics sums the space of both exports and gives the total space, in this case, `20 GB`. It does not understand that `qtree1` is a logical space.

Issue	Solution

The site can't be reached or user login failed after a successful install.	1. Check if XCP services are running:
	`service xcp status`
	
	2. Start the XCP listen operation and confirm that there are no errors:
	
	`xcp -listen`
	
	3. If you see the following error, install the CodeReady packages using yum, such as `yum install codeready-builder-for-rhel-8-x86_64-rpms`:
	
	<pre>Error:
	------- 	
	Traceback (most recent call last):
	  File "xcp.py", line 1146, in <module>
	  File "xcp.py", line 1074, in main
	  File "<frozen importlib._bootstrap>",
	line 991, in _find_and_load
	  File "<frozen importlib._bootstrap>",
	line 975, in _find_and_load_unlocked
	  File "<frozen importlib._bootstrap>",
	line 671, in _load_unlocked
	  File
	"PyInstaller/loader/pyimod03_importers.py"
	, line 495, in exec_module
	  File "rest/routes.py", line 61, in
	<module>
	  File "<frozen importlib._bootstrap>",
	line 991, in _find_and_load
	  File "<frozen importlib._bootstrap>",
	line 975, in _find_and_load_unlocked
	  File "<frozen importlib._bootstrap>",
	line 671, in _load_unlocked
	  File
	"PyInstaller/loader/pyimod03_importers.py"
	, line 495, in exec_module
	  File "onelogin/saml2/auth.py", line 14,
	in <module>
	xmlsec.Error: (1, 'cannot load crypto
	library for xmlsec.')
	[23891] Failed to execute script 'xcp' due
	to unhandled exception!</pre>