[Skip to main content](https://lms.alnafi.com/xblock/block-v1:alnafi+DCCS102+2025_DCCS+type@vertical+block@b91f0468e49f4edf8f295ff5491afca4?exam_access=&recheck_access=1&show_bookmark=0&show_title=0&view=student_view" \l "main)

**Use Netcat to Move Files From One System to Another System**

**Transfer File**

**Netcat allows transferring files through established connections. To see how file transfers work, do the following:**

1. Create a sample file on device 1 using the touch command:

touch file.txt

The command creates an empty text file.

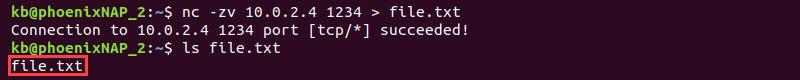
2. Create a listening connection on device 1 and redirect the file to the nc command:

nc -lv 1234 < file.txt



3. On-device 2, connect to device 1 and redirect the file:

nc -zv 10.0.2.4 1234 > file.txt



Confirm the file transfer is complete using the [ls command](https://phoenixnap.com/kb/linux-ls-commands).

The output shows the file name, indicating the transfer was successful.

**Transfer Directory**

Netcat does not allow transferring directories in the same way as files. Use the [tar command](https://phoenixnap.com/kb/tar-command-in-linux) to send multiple files or directories and pipe the command to Netcat.

1. Create a directory on either device and add multiple files:

mkdir files; touch files/file{1..5}.txt

The command creates a files directory with five text files.

2. Navigate to the directory using the [cd command](https://phoenixnap.com/kb/linux-cd-command):

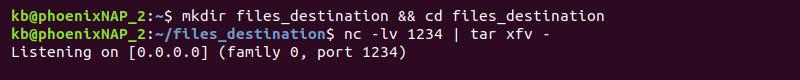
cd files

3. On the other device, create and enter the destination directory:

mkdir files\_destination && cd files\_destination

4. Create a listening connection on port 1234 and pipe the tar command:

nc -lv 1234 | tar xfv -



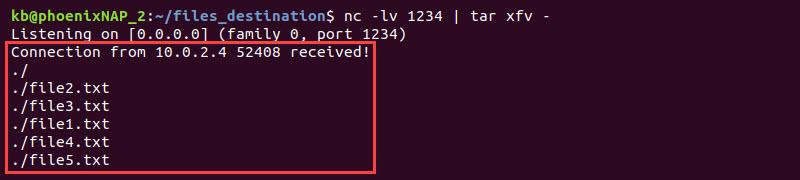
The listening connection expects a file that tar extracts.

5. On the other device, send the directory with:

tar -cf - . | nc -v 10.0.2.5 1234



The connection establishes and sends the tar file.



The receiving end extracts the files immediately, and the transfer is complete.