

# TimeShiftX (TSX) Troubleshooting Guide

Most issues will be user error, license error, or a general time-travel issue. See below guide or read the TSX manual. Also email [support@vornexinc.com](mailto:support@vornexinc.com) for further assistance.

## User app not time traveling

Confirm TSX is working by doing a smoke test with notepad or date. Afterwards make sure...

- 1) the proper service account is time traveling
  - a. For Windows, make sure no whitespaces exist in vcGUI.
- 2) all relevant components are time traveling
- 3) if a cluster, all nodes are time traveling
- 4) the user app does not run as an OS protected account
  - a. Linux = root. TSX does not time travel root
  - b. Windows = SYSTEM, NETWORK SERVICE, LOCAL SERVICE. TSX can time travel but requires editing the JSON file. See TSX Windows Manual.
- 5) the user is not time traveling "seconds"
- 6) if Linux, restart the user's app as it is required one-time to initially load TSX after install
- 7) if Linux with Oracle DB, you must time travel using Oracle SID

## Windows

### Time travel not working

- a) Check services.msc if "Vornex TimeShiftX" service is running
  - a. Make sure "Vornex TimeShiftX" is set to run as Local System
- b) Make sure no Anti-Virus is blocking TSX
- c) Smoke test Notepad
  - a. Open vcGUI
  - b. Set a virtual time for the local user
  - c. Open notepad and press F5 to print date/time
  - d. Delete the virtual time
  - e. Press F5 in notepad to confirm present date/time

If Smoke-test is successful then TSX is working! See "User app not time traveling"

### "Vornex TimeShiftX" Service not starting

- a) Check activate.exe for valid license
  - a. If an error appears, re-apply the client key. If it fails the server is likely offline and will need a manual license file. See "TSX Offline License Guide". If activate.exe still shows an error after the manual license this means the OS clock has been changed and a special license is needed. Please email [support@vornexinc.com](mailto:support@vornexinc.com)
- b) Check C:\Program Files (x86)\Vornex\TimeShiftX\HookingRules.JSON is properly formatted

## Linux

### Time travel not working

- a) Smoke-test time travel (Note: replace bob with any local non-root user)

```
# su - bob  
  
$ tsx set -u bob -d 1  
  
$ date
```

You should see one day in the future.

```
$ tsx reset  
  
$ date
```

You should see the present time

If smoke-test is successful then TSX is working! See “User app not time traveling”

If the above fails, try the below.

- b) Check if license is valid. Run `$ tsxactivate.sh`
- If an error appears, re-apply the client key. If it fails the server is likely offline and will need a manual license file. See “TSX Offline License Guide”. If `tsxactivate.sh` still shows an error after the manual license this means the OS clock has been changed and a special license is needed. Please email [support@vornexinc.com](mailto:support@vornexinc.com)
- c) Check `ld.so.preload` file permissions
- ```
# ls -lrt /etc/ld.so.preload  
Must be -rw-r--r--  
Fix via below, then re-try smoketest  
$ sudo chmod a+r /etc/ld.so.preload
```
- d) Open a new shell / connection and re-try smoke test

### If TSX commands shows SQLite error or “Failed to open DB” error

Run the below

```
# rm /etc/tsx/data/tsx.db  
  
# su - {any regular user}  
  
$ tsx list
```