

System clock check issues

"System clock has been set back" error

If you get a "system clock has been set back" error from LM-X License Manager, LM-X has detected that your system clock has been set back. Under some circumstances, the check can return a false positive. For example, you might have accidentally changed the clock to a future time.

To resolve this problem, you should set the system clock to the correct (present) time. If you believe the error is a mistake and your system clock seems to be correct, ask your application vendor for assistance.

For more information, see [System clock check](#).

"WARN - License checkout not successful for session ..." error

LM-X License Manager may not work as expected if you get an error similar to the following:

```
2016-11-16 11:28:44,435 WARN - License checkout not successful for session Session ID/ Name. Error: LM-X Error:
(Internal: 98 Feature: Name of feature)
System clock has been set back from 1970-Jan-01 00:00:00
For further information go to http://www.x-formation.com
```

Assuming that LM-X client is embedded into an application running on IIS web server and, therefore, uses IIS_IUSRS identity, you need to have read access permissions to the following folder:

```
C:\Windows\SysWOW64\config\systemprofile\AppData\Local\x-formation
```

To resolve this issue, set read access permissions for IIS_IUSRS.

Why is my system clock set to a distant date in the future?

The Windows file system is based on the [Gregorian calendar](#), which was instituted in 1582. Because of the constraints of the Gregorian calendar, you may get a "system clock has been set back" error indicating that the clock has been set back from a distant date in the future, for example:

```
System clock has been set back from 2022-Oct-16 17:30:49
```

ANSI C defines 32-bit `time_t`, which is interpreted as the number of seconds that have elapsed since 00:00:00 UTC on 1 January 1970 to 03:14:07 UTC on 19 January 2038.

LM-X License Manager uses `time_t`, because this is the only portable representation of time across operating systems. If a file from outside the span specified by `time_t` (for example 1750) is detected by Windows, the Windows API changes the time to the one that fits the range represented by the `time_t`, thereby resulting in LM-X informing the user that system clock check has been set back from a random date.

To fix this problem, reset the system clock using the `LmxResetSystemClock` tool to correct the time in the affected files. (See [System clock check](#) for more details.)

Problem with verifying system clock

If there is a problem with using `lmxresetsystemclock.exe` to synchronize your local system's clock with a remote time server, you may see the following error:

```
LM-X Error: Could not verify system clock due to failed connection with remote time server
```

To resolve this problem, it is necessary to verify that UDP port 123 (NTP protocol) is not blocked by a firewall.