

# LMX\_Heartbeat

For local features, the LMX\_Heartbeat function checks whether HostIDs are valid. Note that devices such as dongles can be removed during runtime.

For network features, in addition to checking HostIDs, the LMX\_Heartbeat function checks whether the network connection to the license server is working.

## Prototype

```
LMX_STATUS LMX_Heartbeat
(
    LMX_HANDLE LmxHandle,
    const char *szFeatureName
);
```

## Parameters

### LmxHandle

[in/out] LM-X handle.

## Return values

On success (when local HostIDs are valid and, for network licenses, when the license server connection is up), this function returns the status code LMX\_SUCCESS. Features that do not require HostID checks (borrow, trial, and grace) always return LMX\_SUCCESS.

On failure (one or more local HostIDs are invalid or the license server is down or otherwise unreachable), this function returns an error code in the format described in [Return codes](#).

If you call this function on a feature that does not exist, it will return LMX\_FEATURE\_NOT\_FOUND.

## Remarks

There is no need to call this function for network licenses if you are using [automatic heartbeats](#). (Note that automatic heartbeats are for network licenses only.)

LMX\_Heartbeat should be called in increments of between 30 seconds and 2 minutes. If you call it more often than this, it will return the last cached result.

If heartbeats fail, the client can attempt to make a transparent connection to another server by going through a list of all known servers.

If the license is lost, LMX\_Heartbeat will return LMX\_HEARTBEAT\_LOST\_LICENSE. In the case of a lost license, the client must perform a checkin and then a checkout to continue using the license.

## Example

After a checkin of the feature "f2", the LMX\_Heartbeat function checks whether "f2" connection to the license server is working; for local licenses, LMX\_Heartbeat checks whether HostIDs are still valid, as shown below.

```
#include <lmx.h>
#include <stdio.h>

LMX_HANDLE h;

int main() {
    exit_on_error(LMX_Init(&h));
    exit_on_error(LMX_Checkout(h, "f2", 1, 0, 1));
    exit_on_error(LMX_Heartbeat(h, "f2"));
    return 0;
}
```

The following example shows how to set an automatic heartbeat with the heartbeat frequency set for 60 seconds.

```
#include <lmx.h>
#include <stdio.h>

LMX_HANDLE h;

int main() {
    exit_on_error(LMX_Init(&h));
    exit_on_error(LMX_SetOption(h, LMX_OPT_AUTOMATIC_HEARTBEAT_ATTEMPTS, (LMX_OPTION) 1));
    exit_on_error(LMX_SetOption(h, LMX_OPT_AUTOMATIC_HEARTBEAT_INTERVAL, (LMX_OPTION) 60));
    return 0;
}
```