

# The LM-X protected application and license generator

*This page refers to LM-X v4.5 and newer, which made changes to the SDK distribution. If you are using a version older than v4.5, see [documentation for previous versions](#).*

You generate licenses using `xmllicgen`, as described in [Generating licenses](#). For your protected application to compile, you need to include the `lmx.h` header file.

When linking your application, make sure to use the correct set of libraries for your compilation environment.

For Windows only: A single 32-bit or 64-bit LM-X Windows SDK provides a compatible set of LM-X libraries for each supported version of Visual Studio. During the compilation process, the correct libraries will be selected automatically based on the compiler you use.

If you need to use multiple versions of Visual Studio, or you need to use a different Windows compiler (such as an open source compiler), you can build a dll version of LM-X that lets you use LM-X with both supported and unsupported compilers. This alternative offers the best possible flexibility, because the dll will be independent of the compiler used for building your product.

For full details, see the dll example provided with the distribution.

On Windows, multiple versions of the libraries are provided, with suffixes `_mt`, `_mtd`, `_md` or `_mdd` according to the type:

Suffix	Description	Restrictions
<code>_mt</code>	Multithreaded static C/C++ runtime	
<code>_mtd</code>	Multithreaded static C/C++ debug runtime	<b>You are not permitted to ship your software using this library.</b>
<code>_md</code>	Multithreaded dynamic C/C++ runtime	
<code>_mdd</code>	Multithreaded dynamic C/C++ debug runtime	<b>You are not permitted to ship your software using this library.</b>

Please consult your compiler documentation for further information.

The protected application should be linked with the `liblmxclient` library (`liblmxclient[suffix].lib` on Windows or `liblmxclient.a` on Unix) libraries. See the example makefiles for additional system libraries that might be required for successful linking.