**Java SE 18 & JDK 18** 

**Module** jdk.incubator.foreign **Package** jdk.incubator.foreign

# Interface SymbolLookup

#### **All Known Subinterfaces:**

CLinker

#### **Functional Interface:**

This is a functional interface and can therefore be used as the assignment target for a lambda expression or method reference.

#### @FunctionalInterface

#### public interface SymbolLookup

A symbol lookup. Exposes a lookup operation for searching symbol addresses by name, see lookup(String). A symbol lookup can be used to look up a symbol in a loaded library. Clients can obtain a loader lookup, which can be used to search symbols in libraries loaded by the current classloader (e.g. using System.load(String), or System.loadLibrary(String)). Alternatively, clients can search symbols in the standard C library using a CLinker, which conveniently implements this interface.

Unless otherwise specified, passing a null argument, or an array argument containing one or more null elements to a method in this class causes a NullPointerException to be thrown.

# **Method Summary**

All Methods	Static Methods		Instance Methods		Abstract Methods	
Modifier and Type		Method		Description		
static <b>SymbolLookup</b>		loaderLookup()		Obtains a symbol lookup suitable to find symbols in native libraries associated with the caller's classloader (that is, libraries loaded using System.loadLibrary(java.lang.String) or System.load(java.lang.String)).		
Optional <nativ< th=""><th>veSymbol&gt;</th><th>lookup(S</th><th>tring name)</th><th>Looks up</th><th>a symbol with given n</th><th>ame in this lookup.</th></nativ<>	veSymbol>	lookup(S	tring name)	Looks up	a symbol with given n	ame in this lookup.

### **Method Details**

# lookup

Optional<NativeSymbol> lookup(String name)

Looks up a symbol with given name in this lookup.

### **Parameters:**

name - the symbol name.

# Returns:

the lookup symbol (if any).

### loaderLookup

static SymbolLookup loaderLookup()

Obtains a symbol lookup suitable to find symbols in native libraries associated with the caller's classloader (that is, libraries loaded using System.loadLibrary(java.lang.String) or System.load(java.lang.String)). The returned lookup returns native symbols backed by a non-closeable, shared scope which keeps the caller's classloader reachable.

This method is *restricted*. Restricted methods are unsafe, and, if used incorrectly, their use might crash the JVM or, worse, silently result in memory corruption. Thus, clients should refrain from depending on restricted methods, and use safe and supported functionalities, where possible.

# Returns:

a symbol lookup suitable to find symbols in libraries loaded by the caller's classloader.

# Throws:

IllegalCallerException - if access to this method occurs from a module M and the command line option --enable-native-access is either absent, or does not mention the module name M, or ALL-UNNAMED in case M is an unnamed module.

### Report a bug or suggest an enhancement

For further API reference and developer documentation see the Java SE Documentation, which contains more detailed, developer-targeted descriptions with conceptual overviews, definitions of terms, workarounds, and working code examples. Other versions.

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