

JVMTI Implementation Status

The following tables describe implementation status for JVMTI features specific for different platforms and VM execution modes.

For the description of JVMTI features (capabilities, events, functions) see JVMTI spec on

<http://java.sun.com/j2se/1.5.0/docs/guide/jvmti/jvmti.html>

Notes:

JET - means Jitrino/JET JIT mode

OPT - Jitrino/OPT

+ - means that the feature is implemented for corresponding platform and mode.

Capabilities

| | Name | | Windows / Linux IA32 | | | Windows / Linux x86_64 | | | Linux IA64 |
|-------------|--|-----|-------------------------|-----|-----|---------------------------|-----|---|---------------|
| Interpreter | JET | OPT | Interpreter | JET | OPT | Interpreter | JIT | | |
| 1 | can_tag_objects | + | + | + | + | + | + | + | + |
| 2 | can_generate_field_modification_events | + | + | | + | | | + | |
| 3 | can_generate_field_access_events | + | + | | + | | | + | |
| 4 | can_get_bytecodes | + | + | + | + | + | + | + | + |
| 5 | can_get_synthetic_attribute | + | + | + | + | + | + | + | + |
| 6 | can_get_owned_monitor_info | + | + | + | + | + | + | + | + |
| 7 | can_get_current_contended_monitor | + | + | + | + | + | + | + | + |
| 8 | can_get_monitor_info | + | + | + | + | + | + | + | + |
| 9 | can_pop_frame | + | + | | + | | | + | |
| 10 | can_redefine_classes | | | | | | | | |
| 11 | can_signal_thread | + | + | + | + | + | + | + | + |
| 12 | can_get_source_file_name | + | + | + | + | + | + | + | + |
| 13 | can_get_line_numbers | + | + | + | + | + | + | + | + |
| 14 | can_get_source_debug_extension | + | + | + | + | + | + | + | + |
| 15 | can_access_local_variables | + | + | | + | | | + | |
| 16 | can_maintain_original_method_order | | | | | | | | |
| 17 | can_generate_single_step_events | + | + | | + | | | + | |
| 18 | can_generate_exception_events | + | + | + | + | + | + | + | + |
| 19 | can_generate_frame_pop_events | + | + | | + | | | + | |
| 20 | can_generate_breakpoint_events | + | + | | + | | | + | |
| 21 | can_suspend | + | + | + | + | + | + | + | + |
| 22 | can_redefine_any_class | | | | | | | | |
| 23 | can_get_current_thread_cpu_time | + | + | + | + | + | + | + | + |
| 24 | can_get_thread_cpu_time | + | + | + | + | + | + | + | + |
| 25 | can_generate_method_entry_events | + | + | | + | | | + | |
| 26 | can_generate_method_exit_events | + | + | | + | | | + | |
| 27 | can_generate_all_class_hook_events | + | + | + | + | + | + | + | + |
| 28 | can_generate_compiled_method_load_events | + | + | + | + | + | + | + | + |
| 29 | can_generate_monitor_events | + | + | | + | + | | + | |
| 30 | can_generate_vm_object_alloc_events | + | + | + | + | + | + | + | + |
| 31 | can_generate_native_method_bind_events | + | + | + | + | + | + | + | + |
| 32 | can_generate_garbage_collection_events | + | + | + | + | + | + | + | + |
| 33 | can_generate_object_free_events | + | + | + | + | + | + | + | + |

Events

| | Name | | Windows / Linux IA32 | | | Windows / Linux x86_64 | | | Linux IA64 |
|-------------|----------------------|-----|-------------------------|-----|-----|---------------------------|-----|---|---------------|
| Interpreter | JET | OPT | Interpreter | JET | OPT | Interpreter | JIT | | |
| 1 | Breakpoint | + | + | | + | | | + | |
| 2 | Class File Load Hook | + | + | + | + | + | + | + | + |
| 3 | Class Load | + | + | + | + | + | + | + | + |
| 4 | Class Prepare | + | + | + | + | + | + | + | + |
| 5 | Compiled Method Load | + | + | + | + | + | + | + | + |

| | | | | | | | | | |
|----|-----------------------------|---|---|---|---|---|---|---|---|
| 6 | Compiled Method Unload | | | | | | | | |
| 7 | Data Dump Request | + | + | + | + | + | + | + | + |
| 8 | Dynamic Code Generated | + | + | + | + | + | + | + | + |
| 9 | Exception | + | + | + | + | + | + | + | + |
| 10 | Exception Catch | + | + | + | + | + | + | + | + |
| 11 | Field Access | + | + | | + | | | | + |
| 12 | Field Modification | + | + | | + | | | | + |
| 13 | Frame Pop | + | + | | + | | | | + |
| 14 | Garbage Collection Finished | + | + | + | + | + | + | + | + |
| 15 | Garbage Collection Start | + | + | + | + | + | + | + | + |
| 16 | Method Entry | + | + | | + | | | | + |
| 17 | Method Exit | + | + | | + | | | | + |
| 18 | Monitor Contended Enter | + | + | | + | + | | | + |
| 19 | Monitor Contended Entered | + | + | | + | + | | | + |
| 20 | Monitor Wait | + | + | | + | + | | | + |
| 21 | Monitor Waited | + | + | | + | + | | | + |
| 22 | Native Method Bind | + | + | + | + | + | + | + | + |
| 23 | Object Free | + | + | + | + | + | + | + | + |
| 24 | Single Step | + | + | | + | | | | + |
| 25 | Thread End | + | + | + | + | + | + | + | + |
| 26 | Thread Start | + | + | + | + | + | + | + | + |
| 27 | VM Death Event | + | + | + | + | + | + | + | + |
| 28 | VM Initialization Event | + | + | + | + | + | + | + | + |
| 29 | VM Object Allocation | + | + | + | + | + | + | + | + |
| 30 | VM Start Event | + | + | + | + | + | + | + | + |

Functions

| | Name | | Windows / Linux IA32 | | | Windows / Linux x86_64 | | | Linux IA64 |
|----------|----------------------------|---------|-------------------------|---------|---------|---------------------------|-----|---|---------------|
| Interpre | JET | OP T | Interpreter | JE T | OP T | Interpreter | JIT | | |
| | Memory Management | | | | | | | | |
| 1 | Allocate | + | + | + | + | + | + | + | + |
| 2 | Deallocate | + | + | + | + | + | + | + | + |
| | Thread | | | | | | | | |
| 3 | GetThreadState | + | + | + | + | + | + | + | + |
| 4 | GetAllThreads | + | + | + | + | + | + | + | + |
| 5 | SuspendThread | + | + | + | + | + | + | + | + |
| 6 | SuspendThreadList | + | + | + | + | + | + | + | + |
| 7 | ResumeThread | + | + | + | + | + | + | + | + |
| 8 | ResumeThreadList | + | + | + | + | + | + | + | + |
| 9 | StopThread | + | + | + | + | + | + | + | + |
| 10 | InterruptThread | + | + | + | + | + | + | + | + |
| 11 | GetThreadInfo | + | + | + | + | + | + | + | + |
| 12 | GetOwnedMonitorInfo | + | + | + | + | + | + | + | + |
| 13 | GetCurrentContendedMonitor | + | + | + | + | + | + | + | + |
| 14 | RunAgentThread | + | + | + | + | + | + | + | + |
| 15 | SetThreadLocalStorage | + | + | + | + | + | + | + | + |
| 16 | GetThreadLocalStorage | + | + | + | + | + | + | + | + |
| | Thread Group | | | | | | | | |
| 17 | GetTopThreadGroups | + | + | + | + | + | + | + | + |
| 18 | GetThreadGroupInfo | + | + | + | + | + | + | + | + |
| 19 | GetThreadGroupChildren | + | + | + | + | + | + | + | + |
| | Stack Frame | | | | | | | | |
| 20 | GetStackTrace | + | + | | + | | | + | |
| 21 | GetAllStackTraces | + | + | | + | | | + | |
| 22 | GetThreadListStackTraces | + | + | | + | | | + | |
| 23 | GetFrameCount | + | + | | + | | | + | |
| 24 | PopFrame | + | + | | + | | | + | |
| 25 | GetFrameLocation | + | + | | + | | | + | |
| 26 | NotifyFramePop | + | + | | + | | | + | |
| | Heap | | | | | | | | |
| 27 | GetTag | + | + | + | + | + | + | + | + |
| 28 | SetTag | + | + | + | + | + | + | + | + |

| | | | | | | | | | | | |
|----|---------------------------------------|---|---|--|---|---|---|--|---|---|---|
| 29 | ForceGarbageCollection | + | + | | + | + | + | | + | + | + |
| 30 | IterateOverObjectsReachableFromObject | + | + | | + | + | + | | + | + | + |
| 31 | IterateOverReachableObjects | + | + | | + | + | + | | + | + | + |
| 32 | IterateOverHeap | + | + | | + | + | + | | + | + | + |
| 33 | IterateOverInstancesOfClass | + | + | | + | + | + | | + | + | + |
| 34 | GetObjectsWithTags | + | + | | + | + | + | | + | + | + |
| | Local Variable | | | | | | | | | | |
| 35 | GetLocalObject | + | + | | | + | | | | + | |
| 36 | GetLocalInt | + | + | | | + | | | | + | |
| 37 | GetLocalLong | + | + | | | + | | | | + | |
| 38 | GetLocalFloat | + | + | | | + | | | | + | |
| 39 | GetLocalDouble | + | + | | | + | | | | + | |
| 40 | SetLocalObject | + | + | | | + | | | | + | |
| 41 | SetLocalInt | + | + | | | + | | | | + | |
| 42 | SetLocalLong | + | + | | | + | | | | + | |
| 43 | SetLocalFloat | + | + | | | + | | | | + | |
| 44 | SetLocalDouble | + | + | | | + | | | | + | |
| | Breakpoints | | | | | | | | | | |
| 45 | SetBreakpoint | + | + | | | + | | | | + | |
| 46 | ClearBreakpoint | + | + | | | + | | | | + | |
| | Watched Field | | | | | | | | | | |
| 47 | SetFieldAccessWatch | + | + | | | + | | | | + | |
| 48 | ClearFieldAccessWatch | + | + | | | + | | | | + | |
| 49 | SetFieldModificationWatch | + | + | | | + | | | | + | |
| 50 | ClearFieldModificationWatch | + | + | | | + | | | | + | |
| | Class | | | | | | | | | | |
| 51 | GetLoadedClasses | + | + | | + | + | + | | + | + | + |
| 52 | GetClassLoaderClasses | + | + | | + | + | + | | + | + | + |
| 53 | GetClassSignature | + | + | | + | + | + | | + | + | + |
| 54 | GetClassStatus | + | + | | + | + | + | | + | + | + |
| 55 | GetSourceFileName | + | + | | + | + | + | | + | + | + |
| 56 | GetClassModifiers | + | + | | + | + | + | | + | + | + |
| 57 | GetClassMethods | + | + | | + | + | + | | + | + | + |
| 58 | GetClassFields | + | + | | + | + | + | | + | + | + |
| 59 | GetImplementedInterfaces | + | + | | + | + | + | | + | + | + |
| 60 | IsInterface | + | + | | + | + | + | | + | + | + |
| 61 | IsArrayClass | + | + | | + | + | + | | + | + | + |
| 62 | GetClassLoader | + | + | | + | + | + | | + | + | + |
| 63 | GetSourceDebugExtension | + | + | | + | + | + | | + | + | + |
| 64 | RedefineClasses | | | | | | | | | | |
| | Object | | | | | | | | | | |
| 65 | GetObjectSize | + | + | | + | + | + | | + | + | + |
| 66 | GetObjectHashCode | + | + | | + | + | + | | + | + | + |
| 67 | GetObjectMonitorUsage | + | + | | + | + | + | | + | + | + |
| | Field | | | | | | | | | | |
| 68 | GetFieldName | + | + | | + | + | + | | + | + | + |
| 69 | GetFieldDeclaringClass | + | + | | + | + | + | | + | + | + |
| 70 | GetFieldModifiers | + | + | | + | + | + | | + | + | + |
| 71 | IsFieldSynthetic | + | + | | + | + | + | | + | + | + |
| | Method | | | | | | | | | | |
| 72 | GetMethodName | + | + | | + | + | + | | + | + | + |
| 73 | GetMethodDeclaringClass | + | + | | + | + | + | | + | + | + |
| 74 | GetMethodModifiers | + | + | | + | + | + | | + | + | + |
| 75 | GetMaxLocals | + | + | | + | + | + | | + | + | + |
| 76 | GetArgumentsSize | + | + | | + | + | + | | + | + | + |
| 77 | GetLineNumberTable | + | + | | + | + | + | | + | + | + |
| 78 | GetMethodLocation | + | + | | + | + | + | | + | + | + |
| 79 | GetLocalVariableTable | + | + | | + | + | + | | + | + | + |
| 80 | GetBytecodes | + | + | | + | + | + | | + | + | + |
| 81 | IsMethodNative | + | + | | + | + | + | | + | + | + |
| 82 | IsMethodSynthetic | + | + | | + | + | + | | + | + | + |
| 83 | IsMethodObsolete | + | + | | | + | | | | + | |
| | Raw Monitor | | | | | | | | | | |
| 84 | CreateRawMonitor | + | + | | + | + | + | | + | + | + |

| | | | | | | | | | |
|-----|---------------------------------|---|---|---|---|---|---|---|---|
| 85 | DestroyRawMonitor | + | + | + | + | + | + | + | + |
| 86 | RawMonitorEnter | + | + | + | + | + | + | + | + |
| 87 | RawMonitorExit | + | + | + | + | + | + | + | + |
| 88 | RawMonitorWait | + | + | + | + | + | + | + | + |
| 89 | RawMonitorNotify | + | + | + | + | + | + | + | + |
| 90 | RawMonitorNotifyAll | + | + | + | + | + | + | + | + |
| | JNI Function Interception | | | | | | | | |
| 91 | SetJNIFunctionTable | + | + | + | + | + | + | + | + |
| 92 | GetJNIFunctionTable | + | + | + | + | + | + | + | + |
| | Event Management | | | | | | | | |
| 93 | SetEventCallbacks | + | + | + | + | + | + | + | + |
| 94 | SetEventNotificationMode | + | + | + | + | + | + | + | + |
| 95 | GenerateEvents | + | + | + | + | + | + | + | + |
| | Extension Mechanism | | | | | | | | |
| 96 | GetExtensionFunctions | + | + | + | + | + | + | + | + |
| 97 | GetExtensionEvents | + | + | + | + | + | + | + | + |
| 98 | SetExtensionEventCallback | + | + | + | + | + | + | + | + |
| | Capabilities | | | | | | | | |
| 99 | GetPotentialCapabilities | + | + | + | + | + | + | + | + |
| 100 | AddCapabilities | + | + | + | + | + | + | + | + |
| 101 | RelinquishCapabilities | + | + | + | + | + | + | + | + |
| 102 | GetCapabilities | + | + | + | + | + | + | + | + |
| | Timer | | | | | | | | |
| 103 | GetCurrentThreadCpuTimerInfo | + | + | + | + | + | + | + | + |
| 104 | GetCurrentThreadCpuTime | + | + | + | + | + | + | + | + |
| 105 | GetThreadCpuTimerInfo | + | + | + | + | + | + | + | + |
| 106 | GetThreadCpuTime | + | + | + | + | + | + | + | + |
| 107 | GetTimerInfo | + | + | + | + | + | + | + | + |
| 108 | GetTime | + | + | + | + | + | + | + | + |
| 109 | GetAvailableProcessors | + | + | + | + | + | + | + | + |
| | System Properties | | | | | | | | |
| 110 | AddToBootstrapClassLoaderSearch | + | + | + | + | + | + | + | + |
| 111 | GetSystemProperties | + | + | + | + | + | + | + | + |
| 112 | GetSystemProperty | + | + | + | + | + | + | + | + |
| 113 | SetSystemProperty | + | + | + | + | + | + | + | + |
| | General | | | | | | | | |
| 114 | GetPhase | + | + | + | + | + | + | + | + |
| 115 | DisposeEnvironment | + | + | + | + | + | + | + | + |
| 116 | SetEnvironmentLocalStorage | + | + | + | + | + | + | + | + |
| 117 | GetEnvironmentLocalStorage | + | + | + | + | + | + | + | + |
| 118 | GetVersionNumber | + | + | + | + | + | + | + | + |
| 119 | GetErrorName | + | + | + | + | + | + | + | + |
| 120 | SetVerboseFlag | + | + | + | + | + | + | + | + |
| 121 | GetJLocationFormat | + | + | + | + | + | + | + | + |