



CLEAN
Valkyrie Final Verdict

File Name: vulkan-1.dll
File Type: PE32+ executable (DLL) (console) x86-64, for MS Windows
SHA1: c5a460bf882d091019b62b5ae712a62fd9bf23a0
MD5: 139004a617fae98ec7c474db45a577e6
First Seen Date: 2022-01-31 13:29:29 UTC
Number of Clients Seen: 2
Last Analysis Date: 2022-01-31 13:29:29 UTC
Human Expert Analysis Result: No human expert analysis verdict given to this sample yet.
Verdict Source: Signature Based Detection

Analysis Summary

ANALYSIS TYPE	DATE	VERDICT
Signature Based Detection	2022-02-01 03:14:43 UTC	Clean 
Static Analysis Overall Verdict	2022-01-31 13:29:29 UTC	No Threat Found 
Precise Detectors Overall Verdict	2022-01-31 13:29:29 UTC	No Match 
File Certificate Validation		Not Applicable 

Static Analysis

STATIC ANALYSIS OVERALL VERDICT	RESULT
No Threat Found	

DETECTOR	RESULT
Optional Header LoaderFlags field is valued illegal	Clean 
Non-ascii or empty section names detected	Suspicious 
Illegal size of optional Header	Suspicious 
Packer detection on signature database	Unknown 
Based on the sections entropy check! file is possibly packed	Clean 
Timestamp value suspicious	Suspicious 
Header Checksum is zero!	Suspicious 
Entry point is outside the 1st(.code) section! Binary is possibly packed	Clean 
Optional Header NumberOfRvaAndSizes field is valued illegal	Clean 
Anti-vm present	Clean 
The Size Of Raw data is valued illegal! Binary might crash your disassembler/debugger	Clean 
TLS callback functions array detected	Clean 

Dynamic Analysis

No Dynamic Analysis Result Received

Behavioral Information is not Available

Precise Detectors Analysis Results

DETECTOR NAME	DATE	VERDICT		REASON
Static Precise PUA Detector 1	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise PUA Detector 4	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise NI Detector 3	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise PUA Detector 5	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise Trojan Detector 1	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise Trojan Detector 3	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise PUA Detector 6	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise Trojan Detector 12	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise Virus Detector 1	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise Virus Detector 2	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise Trojan Detector 13	2022-01-31 13:29:25 UTC	No Match	?	NotDetected
Static Precise PUA Detector 2	2022-01-31 13:29:25 UTC	No Match	?	NotDetected

Advance Heuristics

No Advanced Heuristic Analysis Result Received

Additional File Information

Vendor Validation - Vendor Validation is not Applicable ?

Certificate Validation - Certificate Validation is not Applicable ?

PE Headers

PROPERTY	VALUE
Compilation Time Stamp	0x0 [Thu Jan 1 00:00:00 1970 UTC] [SUSPICIOUS]
Debug Artifacts	[object Object]
Entry Point	0x180043670 (.text)
Exifinfo	[object Object]
File Size	733696
File Type Enum	7
Imphash	00a11204bd7ac096090b7bdfc42df6d6
Machine Type	AMD64 only, not Itaniums, with 0200 - 64 bit
Magic Literal Enum	22
Legal Copyright	Copyright (C) 2015-2021
Product Version	1.0.1111.2222.Dev Build
Product Name	Vulkan Runtime
File Version	1.0.1111.2222.Dev Build
File Description	Vulkan Loader - Dev Build
Translation	0x0409 0x0000
Mime Type	application/x-dosexec
Number Of Sections	8
Sha256	1c34bf2e786a62efd1c0e9700c343c09a93995b9513c03346e61a442e78dbd6f
Ssdeep	12288:k/4ijIMwx1R59xBt8/MRTAC6jYJpf8o1pWo:E4ir0R5z80RTQjeV8
Trid	50,Generic Win/DOS Executable,49.9,DOS Executable Generic

PE Sections					
NAME	VIRTUAL ADDRESS	VIRTUAL SIZE	RAW SIZE	ENTROPY	MD5
.text	0x1000	0x7fa56	0x7fc00	6.38097858391	ce389d91fd3bcf1bd595824182d2efcd
.rdata	0x81000	0x2aa04	0x2ac00	5.68834753256	c1323d29c586cae21851437165442104
.data	0xac000	0x4cb8	0x2000	3.5388902771	7e7b225bc0e80a8cd5b2cbe895da746b
.pdata	0xb1000	0x4f14	0x5000	5.73753925167	7c6f3437b052e93ce12c0efd342d7a70
.00cfg	0xb6000	0x10	0x200	0.195869406087	a8a52f8714bd6a20945094aeaea2fa8e
.tls	0xb7000	0x9	0x200	0.0203931352361	1f354d76203061bfdd5a53dae48d5435
.rsrc	0xb8000	0x2d0	0x400	2.48106979684	b9d91be53ac7a55584c4b3c0c08aee06
.reloc	0xb9000	0xd88	0xe00	5.35597156178	20a23c83b068f1a26484dc98cc102f07

PE Imports	
—	 KERNEL32.dll
 AcquireSRWLockExclusive  CloseHandle  CompareStringW  CreateEventW  CreateFileW  DeleteCriticalSection  EncodePointer  EnterCriticalSection  EnumSystemLocalesW	

 ExitProcess

 FileTimeToSystemTime

 FindClose

 FindFirstFileExW

 FindNextFileW

 FlushFileBuffers

 FreeEnvironmentStringsW

 FreeLibrary

 GetACP

 GetCPInfo

 GetCommandLineA

 GetCommandLineW

 GetConsoleMode

 GetConsoleOutputCP

 GetCurrentProcess

 GetCurrentProcessId

 GetCurrentThreadId

 GetDateFormatW

 GetEnvironmentStringsW

 GetEnvironmentVariableA

 GetFileAttributesExW

 GetFileSizeEx

 GetFileType

 GetLastError

 GetLocaleInfoW

 GetModuleFileNameA

 GetModuleFileNameW

 GetModuleHandleA

 GetModuleHandleExA

 GetModuleHandleExW

 GetModuleHandleW

 GetOEMCP

 GetProcAddress

 GetProcessHeap

 GetStartupInfoW

 GetStdHandle

 GetStringTypeW

 GetSystemDirectoryA

 GetSystemTimeAsFileTime

 GetTimeFormatW

 GetTimeZoneInformation

 GetUserDefaultLCID

 HeapAlloc

 HeapFree

 HeapReAlloc

 HeapSize

 InitializeCriticalSection

 InitializeCriticalSectionAndSpinCount

 InitializeSListHead

 InterlockedFlushSList

 IsDebuggerPresent

 IsProcessorFeaturePresent

 IsValidCodePage

 IsValidLocale

 IsWow64Process

 LCMaPStringW

 LeaveCriticalSection

 LoadLibraryA

 LoadLibraryExA

 LoadLibraryExW

 MultiByteToWideChar

 OutputDebugStringA

 QueryPerformanceCounter

 RaiseException

 ReadConsoleW

 ReadFile

 ReleaseSRWLockExclusive

 ResetEvent

 RtlCaptureContext

 RtlLookupFunctionEntry

 RtlPcToFileHeader

 RtlUnwind

 RtlUnwindEx

 RtlVirtualUnwind

-  SetEndOfFile
-  SetEnvironmentVariableW
-  SetEvent
-  SetFilePointerEx
-  SetLastError
-  SetStdHandle
-  SetUnhandledExceptionFilter
-  SleepConditionVariableSRW
-  SystemTimeToTzSpecificLocalTime
-  TerminateProcess
-  TlsAlloc
-  TlsFree
-  TlsGetValue
-  TlsSetValue
-  UnhandledExceptionFilter
-  WaitForSingleObjectEx
-  WakeAllConditionVariable
-  WideCharToMultiByte
-  WriteConsoleW
-  WriteFile

 ADVAPI32.dll

-  GetSidSubAuthority
-  GetSidSubAuthorityCount
-  GetTokenInformation
-  OpenProcessToken
-  RegCloseKey
-  RegEnumValueA
-  RegOpenKeyExA
-  RegQueryValueExA

 CFGMGR32.dll

-  CM_Get_Child
-  CM_Get_DevNode_Registry_PropertyW
-  CM_Get_DevNode_Status
-  CM_Get_Device_IDW
-  CM_Get_Device_ID_ListW
-  CM_Get_Device_ID_List_SizeW
-  CM_Get_Sibling

 CM_Locate_DevNodeW

 CM_Open_DevNode_Key

PE Exports



 vkAcquireNextImage2KHR

 vkAcquireNextImageKHR

 vkAllocateCommandBuffers

 vkAllocateDescriptorSets

 vkAllocateMemory

 vkBeginCommandBuffer

 vkBindBufferMemory

 vkBindBufferMemory2

 vkBindImageMemory

 vkBindImageMemory2

 vkCmdBeginQuery

 vkCmdBeginRenderPass

 vkCmdBeginRenderPass2

 vkCmdBindDescriptorSets

 vkCmdBindIndexBuffer

 vkCmdBindPipeline

 vkCmdBindVertexBuffers

 vkCmdBlitImage

 vkCmdClearAttachments

 vkCmdClearColorImage

 vkCmdClearDepthStencilImage

 vkCmdCopyBuffer

 vkCmdCopyBufferToImage

 vkCmdCopyImage

 vkCmdCopyImageToBuffer

 vkCmdCopyQueryPoolResults

 vkCmdDispatch

 vkCmdDispatchBase

 vkCmdDispatchIndirect

 vkCmdDraw

 vkCmdDrawIndexed

 vkCmdDrawIndexedIndirect

 vkCmdDrawIndexedIndirectCount

 vkCmdDrawIndirect

 vkCmdDrawIndirectCount

 vkCmdEndQuery

 vkCmdEndRenderPass

 vkCmdEndRenderPass2

 vkCmdExecuteCommands

 vkCmdFillBuffer

 vkCmdNextSubpass

 vkCmdNextSubpass2

 vkCmdPipelineBarrier

 vkCmdPushConstants

 vkCmdResetEvent

 vkCmdResetQueryPool

 vkCmdResolveImage

 vkCmdSetBlendConstants

 vkCmdSetDepthBias

 vkCmdSetDepthBounds

 vkCmdSetDeviceMask

 vkCmdSetEvent

 vkCmdSetLineWidth

 vkCmdSetScissor

 vkCmdSetStencilCompareMask

 vkCmdSetStencilReference

 vkCmdSetStencilWriteMask

 vkCmdSetViewport

 vkCmdUpdateBuffer

 vkCmdWaitEvents

 vkCmdWriteTimestamp

 vkCreateBuffer

 vkCreateBufferView

 vkCreateCommandPool

 vkCreateComputePipelines

 vkCreateDescriptorPool

 vkCreateDescriptorSetLayout

 vkCreateDescriptorUpdateTemplate

 vkCreateDevice

 vkCreateDisplayModeKHR

 vkCreateDisplayPlaneSurfaceKHR

 vkCreateEvent

 vkCreateFence

 vkCreateFramebuffer

 vkCreateGraphicsPipelines

 vkCreateImage

 vkCreateImageView

 vkCreateInstance

 vkCreatePipelineCache

 vkCreatePipelineLayout

 vkCreateQueryPool

 vkCreateRenderPass

 vkCreateRenderPass2

 vkCreateSampler

 vkCreateSamplerYcbcrConversion

 vkCreateSemaphore

-  vkCreateShaderModule
-  vkCreateSharedSwapchainsKHR
-  vkCreateSwapchainKHR
-  vkCreateWin32SurfaceKHR
-  vkDestroyBuffer
-  vkDestroyBufferView
-  vkDestroyCommandPool
-  vkDestroyDescriptorPool
-  vkDestroyDescriptorSetLayout
-  vkDestroyDescriptorUpdateTemplate
-  vkDestroyDevice
-  vkDestroyEvent
-  vkDestroyFence
-  vkDestroyFramebuffer
-  vkDestroyImage
-  vkDestroyImageView
-  vkDestroyInstance
-  vkDestroyPipeline
-  vkDestroyPipelineCache
-  vkDestroyPipelineLayout
-  vkDestroyQueryPool
-  vkDestroyRenderPass
-  vkDestroySampler
-  vkDestroySamplerYcbcrConversion
-  vkDestroySemaphore
-  vkDestroyShaderModule
-  vkDestroySurfaceKHR
-  vkDestroySwapchainKHR
-  vkDeviceWaitIdle
-  vkEndCommandBuffer
-  vkEnumerateDeviceExtensionProperties
-  vkEnumerateDeviceLayerProperties
-  vkEnumerateInstanceExtensionProperties
-  vkEnumerateInstanceLayerProperties
-  vkEnumerateInstanceVersion
-  vkEnumeratePhysicalDeviceGroups
-  vkEnumeratePhysicalDevices
-  vkFlushMappedMemoryRanges
-  vkFreeCommandBuffers
-  vkFreeDescriptorSets
-  vkFreeMemory
-  vkGetBufferDeviceAddress
-  vkGetBufferMemoryRequirements
-  vkGetBufferMemoryRequirements2
-  vkGetBufferOpaqueCaptureAddress
-  vkGetDescriptorSetLayoutSupport

-  `vkGetDeviceGroupPeerMemoryFeatures`
-  `vkGetDeviceGroupPresentCapabilitiesKHR`
-  `vkGetDeviceGroupSurfacePresentModesKHR`
-  `vkGetDeviceMemoryCommitment`
-  `vkGetDeviceMemoryOpaqueCaptureAddress`
-  `vkGetDeviceProcAddr`
-  `vkGetDeviceQueue`
-  `vkGetDeviceQueue2`
-  `vkGetDisplayModeProperties2KHR`
-  `vkGetDisplayModePropertiesKHR`
-  `vkGetDisplayPlaneCapabilities2KHR`
-  `vkGetDisplayPlaneCapabilitiesKHR`
-  `vkGetDisplayPlaneSupportedDisplaysKHR`
-  `vkGetEventStatus`
-  `vkGetFenceStatus`
-  `vkGetImageMemoryRequirements`
-  `vkGetImageMemoryRequirements2`
-  `vkGetImageSparseMemoryRequirements`
-  `vkGetImageSparseMemoryRequirements2`
-  `vkGetImageSubresourceLayout`
-  `vkGetInstanceProcAddr`
-  `vkGetPhysicalDeviceDisplayPlaneProperties2KHR`
-  `vkGetPhysicalDeviceDisplayPlanePropertiesKHR`
-  `vkGetPhysicalDeviceDisplayProperties2KHR`
-  `vkGetPhysicalDeviceDisplayPropertiesKHR`
-  `vkGetPhysicalDeviceExternalBufferProperties`
-  `vkGetPhysicalDeviceExternalFenceProperties`
-  `vkGetPhysicalDeviceExternalSemaphoreProperties`
-  `vkGetPhysicalDeviceFeatures`
-  `vkGetPhysicalDeviceFeatures2`
-  `vkGetPhysicalDeviceFormatProperties`
-  `vkGetPhysicalDeviceFormatProperties2`
-  `vkGetPhysicalDeviceImageFormatProperties`
-  `vkGetPhysicalDeviceImageFormatProperties2`
-  `vkGetPhysicalDeviceMemoryProperties`
-  `vkGetPhysicalDeviceMemoryProperties2`
-  `vkGetPhysicalDevicePresentRectanglesKHR`
-  `vkGetPhysicalDeviceProperties`
-  `vkGetPhysicalDeviceProperties2`
-  `vkGetPhysicalDeviceQueueFamilyProperties`
-  `vkGetPhysicalDeviceQueueFamilyProperties2`
-  `vkGetPhysicalDeviceSparseImageFormatProperties`
-  `vkGetPhysicalDeviceSparseImageFormatProperties2`
-  `vkGetPhysicalDeviceSurfaceCapabilities2KHR`
-  `vkGetPhysicalDeviceSurfaceCapabilitiesKHR`

-  `vkGetPhysicalDeviceSurfaceFormats2KHR`
-  `vkGetPhysicalDeviceSurfaceFormatsKHR`
-  `vkGetPhysicalDeviceSurfacePresentModesKHR`
-  `vkGetPhysicalDeviceSurfaceSupportKHR`
-  `vkGetPhysicalDeviceWin32PresentationSupportKHR`
-  `vkGetPipelineCacheData`
-  `vkGetQueryPoolResults`
-  `vkGetRenderAreaGranularity`
-  `vkGetSemaphoreCounterValue`
-  `vkGetSwapchainImagesKHR`
-  `vkInvalidateMappedMemoryRanges`
-  `vkMapMemory`
-  `vkMergePipelineCaches`
-  `vkQueueBindSparse`
-  `vkQueuePresentKHR`
-  `vkQueueSubmit`
-  `vkQueueWaitIdle`
-  `vkResetCommandBuffer`
-  `vkResetCommandPool`
-  `vkResetDescriptorPool`
-  `vkResetEvent`
-  `vkResetFences`
-  `vkResetQueryPool`
-  `vkSetEvent`
-  `vkSignalSemaphore`
-  `vkTrimCommandPool`
-  `vkUnmapMemory`
-  `vkUpdateDescriptorSetWithTemplate`
-  `vkUpdateDescriptorSets`
-  `vkWaitForFences`
-  `vkWaitSemaphores`



PE Resources



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