

Summary

File Name: filedata

File Type: PE32 executable (GUI) Intel 80386, for MS Windows

SHA1: c596d3996b782414fa812a12d91ac6a23e393efd

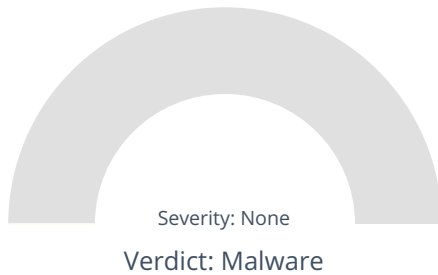
MD5: 615ca56d988022b8a0d46a6865467413



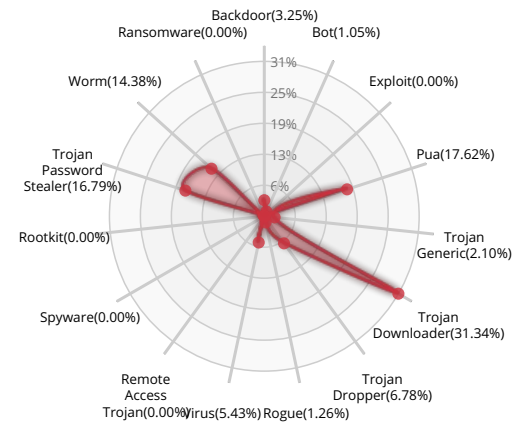
MALWARE

Valkyrie Final Verdict

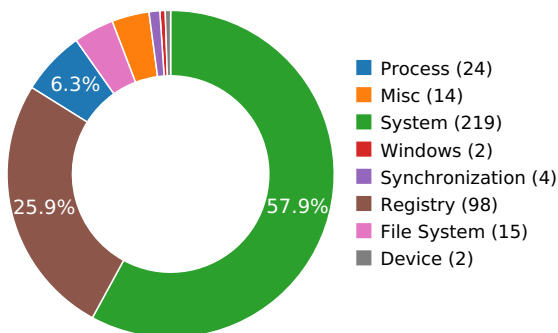
DETECTION SECTION



CLASSIFICATION



HIGH LEVEL BEHAVIOR DISTRIBUTION



ACTIVITY OVERVIEW

Information Discovery	1 (33.33%)
Static Anomaly	1 (33.33%)
Hooking and other Techniques for Hiding Protection	1 (33.33%)

Activity Details

INFORMATION DISCOVERY



Reads data out of its own binary image

Show sources

STATIC ANOMALY



Anomalous binary characteristics

Show sources

HOOKING AND OTHER TECHNIQUES FOR HIDING PROTECTION



Creates RWX memory

Behaviour Graph

11:51:28

11:51:28

11:51:28

PID 2724

11:51:28

Create Process

The malicious file created a child process as c596d3996b782414fa812a12d91ac6a23e393efd.exe (PPID 2576)

11:51:28

VirtualProtectEx

11:51:28

NtReadFile

Behaviour Summary

ACCESSED FILES

C:\Windows\SysWOW64\en-US\KERNELBASE.dll.mui
C:\Users\user\AppData\Local\Temp\netmsg.dll
C:\Windows\System32\netmsg.dll
C:\Users\user\AppData\Local\Temp\c596d3996b782414fa812a12d91ac6a23e393efd.exe
C:\Windows\Fonts\staticcache.dat
C:\Windows\Globalization\Sorting\sortdefault.nls
C:\Users\user\AppData\Local\Temp\imageres.dll
C:\Windows\System32\imageres.dll
\Device\KsecDD

READ REGISTRY KEYS

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows\Windows Error Reporting\WMR\Disable
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\CustomLocale\en-US
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\ExtendedLocale\en-US
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\Locale\00000409
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\Language Groups\1
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\DataStore_V1.0\Disable
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\DataStore_V1.0\DataFilePath
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane1
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane2
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane3
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane4
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane5
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane6
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane7
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane8
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane9
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane10
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane11
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane12
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane13
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane14
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane15

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane16

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\CTF\TIP\{0000897b-83df-4b96-be07-0fb58b01c4a4}\LanguageProfile\0x00000000\{0001bea3-ed56-483d-a2e2-aeae25577436}\Enable

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\CTF\EnableAnchorContext

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\GRE_Initialize\DisableMetaFiles

RESOLVED APIS

kernel32.dll.SetDllDirectoryW

kernel32.dll.SetSearchPathMode

kernel32.dll.SetProcessDEPPolicy

kernel32.dll.Wow64DisableWow64FsRedirection

kernel32.dll.Wow64RevertWow64FsRedirection

kernel32.dll.GetCommandLineW

kernel32.dll.AreFileApisANSI

kernel32.dll.GetModuleFileNameW

kernel32.dll.CreateFileW

kernel32.dll.VirtualAlloc

kernel32.dll.LoadLibraryA

kernel32.dll.VirtualProtect

kernel32.dll.VirtualFree

kernel32.dll.FreeLibrary

kernel32.dll.DeleteCriticalSection

kernel32.dll.LeaveCriticalSection

kernel32.dll.EnterCriticalSection

kernel32.dll.InitializeCriticalSection

kernel32.dll.LocalFree

kernel32.dll.LocalAlloc

kernel32.dll.GetCurrentThreadId

kernel32.dll.WideCharToMultiByte

kernel32.dll.lstrlenA

kernel32.dll.lstrcpynA

kernel32.dll.LoadLibraryExA

kernel32.dll.GetThreadLocale

kernel32.dll.GetStartupInfoA

kernel32.dll.GetProcAddress

kernel32.dll.GetModuleHandleA

kernel32.dll.GetModuleFileNameA

kernel32.dll.GetLocaleInfoA

kernel32.dll.GetCommandLineA

kernel32.dll.FindFirstFileA

kernel32.dll.FindClose

kernel32.dll.ExitProcess

kernel32.dll.WriteFile

kernel32.dll.UnhandledExceptionFilter

kernel32.dll.RtlUnwind

kernel32.dll.RaiseException

kernel32.dll.GetStdHandle

user32.dll.GetKeyboardType

user32.dll.LoadStringA

user32.dll.MessageBoxA

user32.dll.CharNextA

advapi32.dll.RegQueryValueExA

advapi32.dll.RegOpenKeyExA

advapi32.dll.RegCloseKey

oleaut32.dll.SysFreeString

oleaut32.dll.SysReAllocStringLen

kernel32.dll.TlsSetValue

kernel32.dll.TlsGetValue

kernel32.dll.TlsFree

kernel32.dll.TlsAlloc

kernel32.dll.VirtualQueryEx

kernel32.dll.VirtualQuery

kernel32.dll.ReadProcessMemory

kernel32.dll.OpenProcess

kernel32.dll.MoveFileExA

kernel32.dll.GetVersionExW

kernel32.dll.GetVersionExA

kernel32.dll.GetTickCount

kernel32.dll.GetSystemInfo

kernel32.dll.GetStringTypeExA

kernel32.dll.GetDiskFreeSpaceA

kernel32.dll.GetCurrentProcessId

kernel32.dll.GetCPInfo

kernel32.dll.GetACP

kernel32.dll.EnumCalendarInfoA

kernel32.dll.CreateSemaphoreW

kernel32.dll.CloseHandle

kernel32.dll.BuildCommDCBAndTimeoutsA

user32.dll.RegisterClipboardFormatA

user32.dll.GetSystemMetrics

user32.dll.GetLastInputInfo

user32.dll.DlgDirListComboBoxA

kernel32.dll.GetDiskFreeSpaceExA

REGISTRY KEYS

HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\Windows Error Reporting\WMR

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Windows\Windows Error Reporting\WMR\Disable

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Nls\CustomLocale

HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\CustomLocale\en-US

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Nls\ExtendedLocale

HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\ExtendedLocale\en-US

HKEY_CURRENT_USER\Software\Borland\Locales

HKEY_LOCAL_MACHINE\Software\Borland\Locales

HKEY_CURRENT_USER\Software\Borland\Delphi\Locales

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Nls\Locale

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Nls\Locale\Alternate Sorts

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Nls\Language Groups

HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\Locale\00000409

HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Nls\Language Groups\1

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\FontLink\SystemLink

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\DataStore_V1.0

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\DataStore_V1.0\Disable

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\DataStore_V1.0\DataFilePath

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane1

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane2

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane3
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane4
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane5
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane6
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane7
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane8
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane9
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane10
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane11
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane12
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane13
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane14
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane15
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Plane16
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\LanguagePack\SurrogateFallback\Segoe UI
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\CTF\Compatibility\c596d3996b782414fa812a12d91ac6a23e393efd.exe
HKEY_LOCAL_MACHINE\Software\Microsoft\CTF\TIP\{0000897b-83df-4b96-be07-0fb58b01c4a4}\LanguageProfile\0x00000000\{0001bea3-ed56-483d-a2e2-aeae25577436}
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\CTF\TIP\{0000897b-83df-4b96-be07-0fb58b01c4a4}\LanguageProfile\0x00000000\{0001bea3-ed56-483d-a2e2-aeae25577436}\Enable
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\CTF\
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\CTF\EnableAnchorContext
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\CTF\KnownClasses
HKEY_LOCAL_MACHINE\Software\Microsoft\Windows NT\CurrentVersion\GRE_Initialize
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\GRE_Initialize\DisableMetaFiles

READ FILES

C:\Windows\SysWOW64\en-US\KERNELBASE.dll.mui
C:\Windows\System32\netmsg.dll
C:\Users\user\AppData\Local\Temp\c596d3996b782414fa812a12d91ac6a23e393efd.exe
C:\Windows\Fonts\staticcache.dat
C:\Windows\Globalization\Sorting\sortdefault.nls
C:\Windows\System32\imageres.dll
\Device\KsecDD

MUTEXES

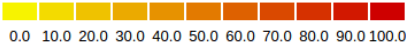
CicLoadWinStaWinSta0



Local\MSCTF.CtfMonitorInstMutexDefault1

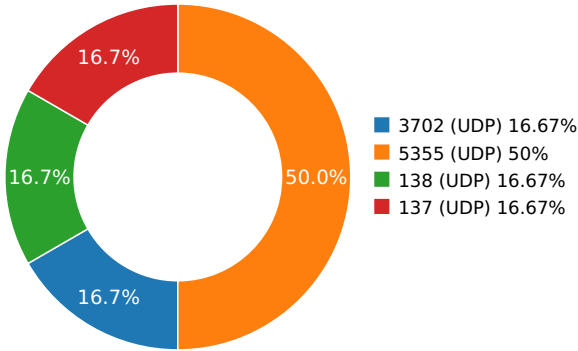
Network Behaviour

CONTACTED IPS



Name	IP	Country	ASN	ASN Name	Trigger Process Type
------	----	---------	-----	----------	----------------------

NETWORK PORT DISTRIBUTION



UDP PACKETS

Call Time During Execution(sec)	Source IP	Dest IP	Dest Port
7.14129090309	Sandbox	224.0.0.252	5355
7.16240787506	Sandbox	224.0.0.252	5355
7.16820287704	Sandbox	239.255.255.250	3702
7.20000600815	Sandbox	192.168.56.255	137
9.71636605263	Sandbox	224.0.0.252	5355
13.198734045	Sandbox	192.168.56.255	138

DETAILED FILE INFO

CREATED / DROPPED FILES

FILE PATH	TYPE AND HASHES
-----------	-----------------

STATIC FILE INFO

File Name:	filedata
File Type:	PE32 executable (GUI) Intel 80386, for MS Windows
SHA1:	c596d3996b782414fa812a12d91ac6a23e393efd
MD5:	615ca56d988022b8a0d46a6865467413
First Seen Date:	2017-06-17 22:12:21.604456 (a day ago)
Number Of Clients Seen:	2
Last Analysis Date:	2017-06-17 22:12:21.604456 (a day ago)
Human Expert Analysis Result:	No human expert analysis verdict given to this sample yet.

DETAILED FILE INFO

ADDITIONAL FILE INFORMATION

PE Headers

PROPERTY	VALUE
File Type Enum	6
Number Of Sections	8
Compilation Time Stamp	0x2A425E19 [Fri Jun 19 22:22:17 1992 UTC] [SUSPICIOUS]
LegalCopyright	Internet
FileVersion	5.1.4.2
CompanyName	
Comments	This installation was built with Inno Setup.
ProductName	Redod
ProductVersion	4.5.6
FileDescription	Redod Setup
Translation	0x0000 0x04b0
Entry Point	0x40a5f8 (CODE)
Machine Type	Intel 386 or later - 32Bit
File Size	1527256
Sha256	5cc49fbb472571ef216aa81fcb0f63e09d533ba11fcf9b0badfc64de6d210635
Mime Type	application/x-dosexec

PE Sections

NAME	VIRTUAL ADDRESS	VIRTUAL SIZE	RAW SIZE	ENTROPY	MD5
CODE	0x1000	0x9d30	0x9e00	6.62607332099	09134bbfe2b42c53497d3fac1d71f439
DATA	0xb000	0x250	0x400	2.75182066229	1ee71d84f1c77af85f1f5c278f880572
BSS	0xc000	0xe8c	0x0	0.0	d41d8cd98f00b204e9800998ecf8427e
.idata	0xd000	0x950	0xa00	4.4307330698	bb5485bf968b970e5ea81292af2acdba
.tls	0xe000	0x8	0x0	0.0	d41d8cd98f00b204e9800998ecf8427e
.rdata	0xf000	0x18	0x200	0.20448815744	9ba824905bf9c7922b6fc87a38b74366
.reloc	0x10000	0x8c4	0x0	0.0	d41d8cd98f00b204e9800998ecf8427e
.rsrc	0x11000	0x2c00	0x2c00	4.53719595799	ff2e3741e6477431947ad5f16a3056b9

PE Imports

- kernel32.dll
 - DeleteCriticalSection
 - LeaveCriticalSection
 - EnterCriticalSection
 - InitializeCriticalSection

- VirtualFree
- VirtualAlloc
- LocalFree
- LocalAlloc
- WideCharToMultiByte
- TlsSetValue
- TlsGetValue
- MultiByteToWideChar
- GetModuleHandleA
- GetLastError
- GetCommandLineA
- WriteFile
- SetFilePointer
- SetEndOfFile
- RtlUnwind
- ReadFile
- RaiseException
- GetStdHandle
- GetFileSize
- GetSystemTime
- GetFileType
- ExitProcess
- CreateFileA
- CloseHandle
- user32.dll
 - MessageBoxA
- oleaut32.dll
 - VariantChangeTypeEx
 - VariantCopyInd
 - VariantClear
 - SysStringLen
 - SysAllocStringLen
- advapi32.dll
 - RegQueryValueExA
 - RegOpenKeyExA
 - RegCloseKey
 - OpenProcessToken
 - LookupPrivilegeValueA
- kernel32.dll
 - WriteFile
 - VirtualQuery
 - VirtualProtect
 - VirtualFree
 - VirtualAlloc
 - Sleep
 - SizeofResource
 - SetLastError
 - SetFilePointer
 - SetErrorMode
 - SetEndOfFile
 - RemoveDirectoryA
 - ReadFile
 - LockResource
 - LoadResource
 - LoadLibraryA
 - IsDBCSLeadByte
 - GetWindowsDirectoryA
 - GetVersionExA
 - GetUserDefaultLangID
 - GetSystemInfo
 - GetSystemDefaultLCID
 - GetProcAddress
 - GetModuleHandleA
 - GetModuleFileNameA
 - GetLocaleInfoA
 - GetLastError
 - GetFullPathNameA
 - GetFileSize
 - GetFileAttributesA
 - GetExitCodeProcess
 - GetEnvironmentVariableA
 - GetCurrentProcess
 - GetCommandLineA
 - GetACP
 - InterlockedExchange

- FormatMessageA
- FindResourceA
- DeleteFileA
- CreateProcessA
- CreateFileA
- CreateDirectoryA
- CloseHandle
- user32.dll
 - TranslateMessage
 - SetWindowLongA
 - PeekMessageA
 - MsgWaitForMultipleObjects
 - MessageBoxA
 - LoadStringA
 - ExitWindowsEx
 - DispatchMessageA
 - DestroyWindow
 - CreateWindowExA
 - CallWindowProcA
 - CharPrevA
- comctl32.dll
 - InitCommonControls
- advapi32.dll
 - AdjustTokenPrivileges

PE Resources

-  RT_ICON
-  RT_STRING
-  RT_RCDATA
-  RT_GROUP_ICON
-  RT_VERSION
-  RT_MANIFEST

CERTIFICATE VALIDATION

- Success 

[+] VIZARD-TORG, TOV	
Status	NoError 
Start Date	2017-03-01 00:00:00+00:00
End Date	2018-03-01 23:59:59+00:00
Sha256	32094389aca8cf52bf4d3dd9ec88000f8875a2e82aa3b97b172e0f76c685fad4
Serial	00B3389E614CF0C2D06A9AEBBACB8443D3
Subject Key Identifier	07 5b e6 45 a3 f8 ea 71 2b a7 c2 89 97 b5 3d 6d 85 3a 98 4e
Issuer Name	COMODO RSA Code Signing CA
Issuer Key Identifier	29 91 60 ff 8a 4d fa eb f9 a6 6a b8 cf f9 e6 4b bd 49 ce 12
Crl link	http://crl.comodoca.com/COMODORSACodeSigningCA.crl
Key Usage	Digital Signature (80)
Extended Usage	Code Signing (1.3.6.1.5.5.7.3.3)

[+] COMODO RSA Code Signing CA	
Status	NoError ✓
Start Date	2013-05-09 00:00:00+00:00
End Date	2028-05-08 23:59:59+00:00
Sha256	be4b37864cefc39611d4b6a1de110074e5f282de90016aa5d36849ab452eab2c
Serial	2E7C87CC0E934A52FE94FD1CB7CD34AF
Subject Key Identifier	29 91 60 ff 8a 4d fa eb f9 a6 6a b8 cf f9 e6 4b bd 49 ce 12
Issuer Name	COMODO RSA Certification Authority
Issuer Key Identifier	bb af 7e 02 3d fa a6 f1 3c 84 8e ad ee 38 98 ec d9 32 32 d4
Crl link	http://crl.comodoca.com/COMODORSACertificationAuthority.crl
Key Usage	Digital Signature,Certificate Signing,Off-line CRL Signing,CRL Signing (86)
Extended Usage	Code Signing (1.3.6.1.5.5.7.3.3)

[+] COMODO RSA Certification Authority	
Status	NoError ✓
Start Date	2010-01-19 00:00:00+00:00
End Date	2038-01-18 23:59:59+00:00
Sha256	f1bc8293a80c7d1bb2fd1d6e9b714b06e6b66686ca9b26a76d91e06e2934fa83
Serial	4CAAF9CADB636FE01FF74ED85B03869D
Subject Key Identifier	bb af 7e 02 3d fa a6 f1 3c 84 8e ad ee 38 98 ec d9 32 32 d4
Issuer Name	COMODO RSA Certification Authority
Issuer Key Identifier	undefined
Crl link	undefined
Key Usage	Certificate Signing,Off-line CRL Signing,CRL Signing (06)
Extended Usage	undefined

SCREENSHOTS

