



**CLEAN**  
Valkyrie Final Verdict

**File Name:** None  
**File Type:** PE32 executable (GUI) Intel 80386, for MS Windows  
**SHA1:** 43ee5c9c3970b48f2fe82c3ab3c6dcf1b1de1b07  
**MD5:** 20127c15e4a153322c63a734aebf7513  
**First Seen Date:** 2019-08-04 05:19:17 UTC  
**Number of Clients Seen:** 26  
**Last Analysis Date:** 2024-10-13 00:02:42 UTC  
**Human Expert Analysis Date:** 2019-08-04 11:48:44 UTC  
**Human Expert Analysis Result:** Clean  
**Verdict Source:** Valkyrie Human Expert Analysis Overall Verdict

## Analysis Summary

| ANALYSIS TYPE                         | DATE                    | VERDICT                          |   |
|---------------------------------------|-------------------------|----------------------------------|---|
| Signature Based Detection             | 2024-10-13 00:02:42 UTC | Clean                            | ✓ |
| Static Analysis Overall Verdict       | 2024-10-13 00:02:42 UTC | No Threat Found                  | ? |
| Precise Detectors Overall Verdict     | 2024-10-13 00:02:42 UTC | No Match                         | ? |
| Human Expert Analysis Overall Verdict | 2019-08-04 11:48:44 UTC | Clean                            | ✓ |
| File Certificate Validation           |                         | Vendor not found in Trusted List | ? |

## 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                                             | Clean      | ✓ |
| Illegal size of optional Header                                                       | Clean      | ✓ |
| Packer detection on signature database                                                | Unknown    | ? |
| Based on the sections entropy check! file is possibly packed                          | Clean      | ✓ |
| Timestamp value suspicious                                                            | Clean      | ✓ |
| Header Checksum is zero!                                                              | Clean      | ✓ |
| 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 | Suspicious | ! |
| 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     | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise PUA Detector 4     | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise NI Detector 3      | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise PUA Detector 5     | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise Trojan Detector 1  | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise Trojan Detector 3  | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise PUA Detector 6     | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise Trojan Detector 12 | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise Virus Detector 1   | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise Virus Detector 2   | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise Trojan Detector 13 | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |
| Static Precise PUA Detector 2     | 2024-10-13 00:02:39 UTC | No Match | ? | NotDetected |

Advance Heuristics

No Advanced Heuristic Analysis Result Received

Human Expert Analysis Results

**Analysis Start Date:** 2019-08-04 09:00:37 UTC  
**Analysis End Date:** 2019-08-04 11:48:44 UTC  
**File Upload Date:** 2019-08-04 04:58:24 UTC  
**Human Expert Analyst Feedback:** None  
**Verdict:** Clean

Additional File Information

|                                    |             |   |
|------------------------------------|-------------|---|
| Vendor Validation - Not Verified ❌ |             | ▼ |
| [+] Restoro Ltd.                   |             |   |
| Status                             | Not Valid ❌ |   |

|                                     |  |   |
|-------------------------------------|--|---|
| Certificate Validation - Success ✔️ |  | ▼ |
| [+] Thawte Timestamping CA          |  |   |

|                             |                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------|
| Status                      | NoError  |
| Start Date                  | 1997-01-01 02:00:00                                                                      |
| End Date                    | 2021-01-01 01:59:59                                                                      |
| Sha256                      | f429a67538b1053ebe3ad5587247d3a6845a82b3e687e079263181f53dbe26d7                         |
| Serial                      | 00                                                                                       |
| Subject Name                | Thawte Timestamping CA                                                                   |
| Subject Key Identifier      | null                                                                                     |
| Subject Organization        | Thawte                                                                                   |
| Subject Locality            | Durbanville                                                                              |
| Subject State               | Western Cape                                                                             |
| Subject Country             | ZA                                                                                       |
| Subject Organizational Unit | Thawte Certification                                                                     |
| Issuer Name                 | Thawte Timestamping CA                                                                   |
| Issuer Key Identifier       | null                                                                                     |
| Issuer Organization         | Thawte                                                                                   |
| Issuer Locality             | Durbanville                                                                              |
| Issuer State                | Western Cape                                                                             |
| Issuer Country              | ZA                                                                                       |
| Issuer Organizational Unit  | Thawte Certification                                                                     |
| Crl link                    | null                                                                                     |
| Key Usage                   | null                                                                                     |
| Extended Usage              | null                                                                                     |

[+] Symantec Time Stamping Services CA - G2

|                            |                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------|
| Status                     | NoError  |
| Start Date                 | 2012-12-21 02:00:00                                                                         |
| End Date                   | 2020-12-31 01:59:59                                                                         |
| Sha256                     | 0b44526ab89f4778858bf831045ec218d0d57734caa10208ea3d8c90c1043266                            |
| Serial                     | 7E93EBFB7CC64E59EA4B9A77D406FC3B                                                            |
| Subject Name               | Symantec Time Stamping Services CA - G2                                                     |
| Subject Key Identifier     | 5f 9a f5 6e 5c cc cc 74 9a d4 dd 7d ef 3f db ec 4c 80 2e dd                                 |
| Subject Organization       | Symantec Corporation                                                                        |
| Subject Country            | US                                                                                          |
| Issuer Name                | Thawte Timestamping CA                                                                      |
| Issuer Key Identifier      | null                                                                                        |
| Issuer Organization        | Thawte                                                                                      |
| Issuer Locality            | Durbanville                                                                                 |
| Issuer State               | Western Cape                                                                                |
| Issuer Country             | ZA                                                                                          |
| Issuer Organizational Unit | Thawte Certification                                                                        |
| Crl link                   | http://crl.thawte.com/ThawteTimestampingCA.crl                                              |
| Key Usage                  | {"Certificate Signing", "Off-line CRL Signing", "CRL Signing (06)"}                         |
| Extended Usage             | {"Time Stamping (1.3.6.1.5.5.7.3.8)"}                                                       |

[+] VeriSign Class 3 Public Primary Certification Authority - G5

|                             |                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------|
| Status                      | NoError  |
| Start Date                  | 2006-11-08 02:00:00                                                                      |
| End Date                    | 2036-07-17 02:59:59                                                                      |
| Sha256                      | d0c133d98cabb2199501a761f5b8b9afd30d870477a534b41400a6dc57f5d64d                         |
| Serial                      | 18DAD19E267DE8BB4A2158CDCC6B3B4A                                                         |
| Subject Name                | VeriSign Class 3 Public Primary Certification Authority - G5                             |
| Subject Key Identifier      | 7f d3 65 a7 c2 dd ec bb f0 30 09 f3 43 39 fa 02 af 33 31 33                              |
| Subject Organization        | VeriSign, Inc.                                                                           |
| Subject Country             | US                                                                                       |
| Subject Organizational Unit | (c) 2006 VeriSign, Inc. - For authorized use only                                        |
| Issuer Name                 | VeriSign Class 3 Public Primary Certification Authority - G5                             |
| Issuer Key Identifier       | null                                                                                     |
| Issuer Organization         | VeriSign, Inc.                                                                           |
| Issuer Country              | US                                                                                       |
| Issuer Organizational Unit  | (c) 2006 VeriSign, Inc. - For authorized use only                                        |
| Crl link                    | null                                                                                     |
| Key Usage                   | {"Certificate Signing","Off-line CRL Signing","CRL Signing (06)"}                        |
| Extended Usage              | null                                                                                     |

**[+] Symantec Class 3 SHA256 Code Signing CA**

|                             |                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------|
| Status                      | NoError  |
| Start Date                  | 2013-12-10 02:00:00                                                                       |
| End Date                    | 2023-12-10 01:59:59                                                                       |
| Sha256                      | 0649cde463467e8e26bb6b7c23965e030248f95df21f6dcf28c51507fbb77c08                          |
| Serial                      | 3D78D7F9764960B2617DF4F01ECA862A                                                          |
| Subject Name                | Symantec Class 3 SHA256 Code Signing CA                                                   |
| Subject Key Identifier      | 96 3b 53 f0 79 33 97 af 7d 83 ef 2e 2b cc ca b7 86 1e 72 66                               |
| Subject Organization        | Symantec Corporation                                                                      |
| Subject Country             | US                                                                                        |
| Subject Organizational Unit | Symantec Trust Network                                                                    |
| Issuer Name                 | VeriSign Class 3 Public Primary Certification Authority - G5                              |
| Issuer Key Identifier       | 7f d3 65 a7 c2 dd ec bb f0 30 09 f3 43 39 fa 02 af 33 31 33                               |
| Issuer Organization         | VeriSign, Inc.                                                                            |
| Issuer Country              | US                                                                                        |
| Issuer Organizational Unit  | (c) 2006 VeriSign, Inc. - For authorized use only                                         |
| Crl link                    | http://s1.symcb.com/pca3-g5.crl                                                           |
| Key Usage                   | {"Certificate Signing","Off-line CRL Signing","CRL Signing (06)"}                         |
| Extended Usage              | {"Client Authentication (1.3.6.1.5.5.7.3.2)"}                                             |

**[+] Restoro Ltd.**

|                             |                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------|
| Status                      | NoError  |
| Start Date                  | 2019-03-05 02:00:00                                                                      |
| End Date                    | 2020-03-05 01:59:59                                                                      |
| Sha256                      | 23dc54ac0bacfbc1e1ba7cc4f27f1fab2b72a371904d778eea400c656307d8f7                         |
| Serial                      | 0D565488217137EE9C7ACEA4002FD68B                                                         |
| Subject Name                | Restoro Ltd.                                                                             |
| Subject Key Identifier      | 4e a1 ca 64 dd 8a fe 45 9b 1e 92 35 5a db 72 a8 45 33 31 52                              |
| Subject Organization        | Restoro Ltd.                                                                             |
| Subject Locality            | Douglas                                                                                  |
| Subject Country             | IM                                                                                       |
| Subject Organizational Unit | Restoro Ltd.                                                                             |
| Issuer Name                 | Symantec Class 3 SHA256 Code Signing CA                                                  |
| Issuer Key Identifier       | 96 3b 53 f0 79 33 97 af 7d 83 ef 2e 2b cc ca b7 86 1e 72 66                              |
| Issuer Organization         | Symantec Corporation                                                                     |
| Issuer Country              | US                                                                                       |
| Issuer Organizational Unit  | Symantec Trust Network                                                                   |
| Crl link                    | <a href="http://sv.symcb.com/sv.crl">http://sv.symcb.com/sv.crl</a>                      |
| Key Usage                   | {"Digital Signature (80)"}                                                               |
| Extended Usage              | {"Code Signing (1.3.6.1.5.5.7.3.3)"}                                                     |

 PE Headers



| PROPERTY               | VALUE                                                                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compilation Time Stamp | 0x4F47E2DF [Fri Feb 24 19:19:59 2012 UTC]                                                                                                                                          |
| Debug Artifacts        |                                                                                                                                                                                    |
| Entry Point            | 0x4039e3 (.text)                                                                                                                                                                   |
| Exifinfo               | [object Object]                                                                                                                                                                    |
| File Size              | 935168                                                                                                                                                                             |
| File Type Enum         | 6                                                                                                                                                                                  |
| Imphash                | 32f3282581436269b3a75b6675fe3e08                                                                                                                                                   |
| Machine Type           | Intel 386 or later - 32Bit                                                                                                                                                         |
| Magic Literal Enum     | 3                                                                                                                                                                                  |
| Legal Copyright        | \xa9 Restoro 2019                                                                                                                                                                  |
| Internal Name          | Restoro Downloader                                                                                                                                                                 |
| File Version           | 2.016                                                                                                                                                                              |
| Company Name           | Restoro                                                                                                                                                                            |
| Legal Trademarks       | Restoro                                                                                                                                                                            |
| Product Name           | Restoro                                                                                                                                                                            |
| Product Version        | 2.016                                                                                                                                                                              |
| File Description       | Restoro Downloader                                                                                                                                                                 |
| Translation            | 0x0000 0x04b0                                                                                                                                                                      |
| Mime Type              | application/x-dosexec                                                                                                                                                              |
| Number Of Sections     | 6                                                                                                                                                                                  |
| Sha256                 | 951ed0a81277e09e0416174c970fcdbed93745c9993d0fc649d576872d3c75a9                                                                                                                   |
| Ssdeep                 | 12288:REVLcMwpsGcDdHCfKbQTIHmHGluO0Q9zY8cEtDcZeOc2oVWX:RucLyNCCIsO0Q97Xmep4                                                                                                        |
| Trid                   | 42.2,Win32 Executable MS Visual C++ (generic),37.3,Win64 Executable (generic),8.8,Win32 Dynamic Link Library (generic),6,Win32 Executable (generic),2.7,Generic Win/DOS Executable |

 PE Sections



| NAME   | VIRTUAL ADDRESS | VIRTUAL SIZE | RAW SIZE | ENTROPY       | MD5                              |
|--------|-----------------|--------------|----------|---------------|----------------------------------|
| .text  | 0x1000          | 0x6f10       | 0x7000   | 6.49788465186 | f569e353af0ed51bf4c216faa9bed4e7 |
| .rdata | 0x8000          | 0x2a92       | 0x2c00   | 4.39389365097 | 91eee43954e068e650f7b73a8b0e6915 |
| .data  | 0xb000          | 0x67ebc      | 0x200    | 1.472782261   | db9f7acbf1c3ddfe255077b699955dfa |
| .ndata | 0x73000         | 0x339000     | 0x0      | 0.0           | d41d8cd98f00b204e9800998ecf8427e |
| .rsrc  | 0x3ac000        | 0x4bfe9      | 0x4c000  | 4.92448718034 | 6d955beda33ddd993629bba1ad41c7b4 |
| .reloc | 0x3f8000        | 0xf8a        | 0x1000   | 3.23379612354 | f4ad22215006a677ade6a73cdeab789f |