



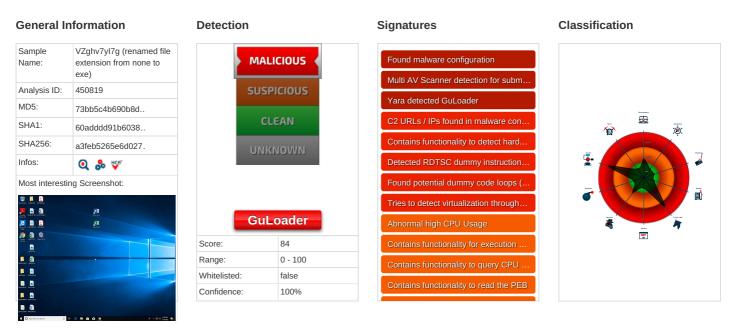
ID: 450819 Sample Name: VZghv7yI7g Cookbook: default.jbs Time: 18:34:13 Date: 19/07/2021 Version: 33.0.0 White Diamond

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|   | TO          |

# Windows Analysis Report VZghv7yl7g

### **Overview**



# **Process Tree**

- System is w10x64
- (B) VZghv7yI7g.exe (PID: 2256 cmdline: 'C:\Users\user\Desktop\VZghv7yI7g.exe' MD5: 73BB5C4B690B8D6DF88D6BC18FB3A553)
- cleanup

# **Malware Configuration**

### Threatname: GuLoader

"Payload URL": "https://bamontarquitectura.com.mx/IRANSAT\_kowbB4.bi]"
}

## Yara Overview

#### **Memory Dumps**

| Source   | Rule                   | Description               | Author       | Strings |
|--|------------------------|---------------------------|--------------|---------|
| 00000000.00000002.756540382.00000000225<br>0000.00000040.00000001.sdmp | JoeSecurity_GuLoader_2 | Yara detected<br>GuLoader | Joe Security |         |

### Sigma Overview

No Sigma rule has matched

## Jbx Signature Overview

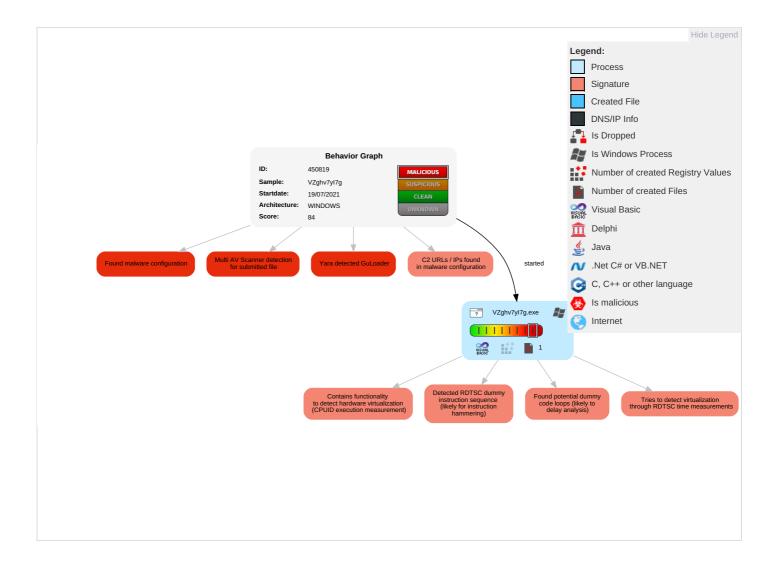
| AV Detection:  |  |
|--|--|
| Found malware configuration  |  |
| Multi AV Scanner detection for submitted file  |  |
| Networking:  |  |
| C2 URLs / IPs found in malware configuration   |  |
| Data Obfuscation:  |  |
| Yara detected GuLoader   |  |
| Malware Analysis System Evasion:   |  |
| Contains functionality to detect hardware virtualization (CPUID execution measurement) |  |
| Detected RDTSC dummy instruction sequence (likely for instruction hammering)           |  |
| Tries to detect virtualization through RDTSC time measurements                         |  |
| Anti Debugging:  |  |

Found potential dummy code loops (likely to delay analysis)

# Mitre Att&ck Matrix

| Initial<br>Access   | Execution                                | Persistence                                   | Privilege<br>Escalation                       | Defense Evasion                      | Credential<br>Access           | Discovery                             | Lateral<br>Movement                      | Collection                                  | Exfiltration                                    | Command<br>and Control             | Network<br>Effects                                   |
|---------------------|--|---|---|--------------------------------------|--------------------------------|---------------------------------------|--|---|---|------------------------------------|--|
| Valid<br>Accounts   | Windows<br>Management<br>Instrumentation | Path<br>Interception                          | Process<br>Injection 1                        | Virtualization/Sandbox<br>Evasion 11 | OS<br>Credential<br>Dumping    | Security Software<br>Discovery 4 1    | Remote<br>Services                       | Archive<br>Collected<br>Data <mark>1</mark> | Exfiltration<br>Over Other<br>Network<br>Medium | Encrypted<br>Channel 1             | Eavesdrop on<br>Insecure<br>Network<br>Communication |
| Default<br>Accounts | Scheduled<br>Task/Job                    | Boot or<br>Logon<br>Initialization<br>Scripts | Boot or<br>Logon<br>Initialization<br>Scripts | Process Injection 1                  | LSASS<br>Memory                | Virtualization/Sandbox<br>Evasion 11  | Remote<br>Desktop<br>Protocol            | Data from<br>Removable<br>Media             | Exfiltration<br>Over<br>Bluetooth               | Application<br>Layer<br>Protocol 1 | Exploit SS7 to<br>Redirect Phone<br>Calls/SMS        |
| Domain<br>Accounts  | At (Linux)                               | Logon Script<br>(Windows)                     | Logon<br>Script<br>(Windows)                  | Obfuscated Files or<br>Information 1 | Security<br>Account<br>Manager | Process Discovery 1                   | SMB/Windows<br>Admin Shares              | Data from<br>Network<br>Shared<br>Drive     | Automated<br>Exfiltration                       | Steganography                      | Exploit SS7 to<br>Track Device<br>Location           |
| Local<br>Accounts   | At (Windows)                             | Logon Script<br>(Mac)                         | Logon<br>Script<br>(Mac)                      | Binary Padding                       | NTDS                           | System Information<br>Discovery 3 1 1 | Distributed<br>Component<br>Object Model | Input<br>Capture                            | Scheduled<br>Transfer                           | Protocol<br>Impersonation          | SIM Card<br>Swap                                     |

# **Behavior Graph**



### **Screenshots**

### Thumbnails

This section contains all screenshots as thumbnails, including those not shown in the slideshow.





# Antivirus, Machine Learning and Genetic Malware Detection

| Initial Sample  |           |                  |                   |        |
|---|-----------|------------------|-------------------|--------|
| Source  | Detection | Scanner La       | ıbel              | Link   |
| VZghv7yl7g.exe  | 30%       | Virustotal       |                   | Browse |
| VZghv7yl7g.exe  | 13%       | ReversingLabs Wi | in32.Backdoor.Ren | ncos   |
| Dropped Files   |           |                  |                   |        |
| No Antivirus matches  |           |                  |                   |        |
| Unpacked PE Files   |           |                  |                   |        |
| No Antivirus matches  |           |                  |                   |        |
| Domains   |           |                  |                   |        |
| No Antivirus matches  |           |                  |                   |        |
| URLs  |           |                  |                   |        |
| Source  | Detection | Scanner          | Label             | Link   |
| http://https://bamontarquitectura.com.mx/IRANSAT_kowbB4.bi} | 0%        | Virustotal       |                   | Browse |
| http://https://bamontarquitectura.com.mx/IRANSAT_kowbB4.bi} | 0%        | Avira URL Cloud  | safe              |        |

| Domains and IPs   |           |                          |            |
|---|-----------|--------------------------|------------|
| Contacted Domains   |           |                          |            |
| No contacted domains info                                   |           |                          |            |
| Contacted URLs  |           |                          |            |
| Name  | Malicious | Antivirus Detection      | Reputation |
|   | true      | • 0%, Virustotal, Browse | unknown    |
| http://https://bamontarquitectura.com.mx/IRANSAT_kowbB4.bi} |           | Avira URL Cloud: safe    |            |
| http://https://bamontarquitectura.com.mx/IRANSA1_kowbB4.bi} |           | Avira URL Cloud: safe    |            |

# **General Information**

| Joe Sandbox Version:                               | 33.0.0 White Diamond   |
|--|--|
| Analysis ID:                                       | 450819   |
| Start date:  | 19.07.2021   |
| Start time:  | 18:34:13   |
| Joe Sandbox Product:                               | CloudBasic   |
| Overall analysis duration:                         | 0h 8m 4s   |
| Hypervisor based Inspection enabled:               | false  |
| Report type:                                       | light  |
| Sample file name:                                  | VZghv7yl7g (renamed file extension from none to exe)   |
| Cookbook file name:                                | default.jbs  |
| Analysis system description:                       | Windows 10 64 bit v1803 with Office Professional Plus 2016, Chrome 85, IE 11, Adobe Reader DC 19, Java 8 Update 211                                |
| Number of analysed new started processes analysed: | 28   |
| Number of new started drivers analysed:            | 0  |
| Number of existing processes analysed:             | 0  |
| Number of existing drivers analysed:               | 0  |
| Number of injected processes analysed:             | 0  |
| Technologies:                                      | <ul> <li>HCA enabled</li> <li>EGA enabled</li> <li>HDC enabled</li> <li>AMSI enabled</li> </ul>  |
| Analysis Mode:                                     | default  |
| Analysis stop reason:                              | Timeout  |
| Detection:   | MAL  |
| Classification:                                    | mal84.troj.evad.winEXE@1/0@0/0   |
| EGA Information:                                   | Successful, ratio: 100%  |
| HDC Information:                                   | <ul> <li>Successful, ratio: 61.1% (good quality ratio 26.9%)</li> <li>Quality average: 24.1%</li> <li>Quality standard deviation: 32.8%</li> </ul> |
| HCA Information:                                   | Failed   |
| Cookbook Comments:                                 | <ul> <li>Adjust boot time</li> <li>Enable AMSI</li> <li>Override analysis time to 240s for sample files taking high CPU consumption</li> </ul>     |
| Warnings:  | Show All   |

# Simulations

### **Behavior and APIs**

# Joe Sandbox View / Context

| IPs              |
|------------------|
|                  |
| No context       |
|                  |
| Domains          |
|                  |
| No context       |
|                  |
| ASN              |
|                  |
| No context       |
|                  |
| JA3 Fingerprints |
|                  |
| No context       |
|                  |
| Dropped Files    |
|                  |
| No context       |

# **Created / dropped Files**

No created / dropped files found

## **Static File Info**

| General               |   |
|-----------------------|---|
| File type:            | PE32 executable (GUI) Intel 80386, for MS Windows   |
| Entropy (8bit):       | 6.2221702126738   |
| TrID:                 | <ul> <li>Win32 Executable (generic) a (10002005/4)<br/>99.15%</li> <li>Win32 Executable Microsoft Visual Basic 6<br/>(82127/2) 0.81%</li> <li>Generic Win/DOS Executable (2004/3) 0.02%</li> <li>DOS Executable Generic (2002/1) 0.02%</li> <li>Autodesk FLIC Image File (extensions: flc, fli, cel)<br/>(7/3) 0.00%</li> </ul> |
| File name:            | VZghv7yI7g.exe  |
| File size:            | 241664  |
| MD5:                  | 73bb5c4b690b8d6df88d6bc18fb3a553  |
| SHA1:                 | 60adddd91b6038fc9d819cf6d647ce3be0b11d38  |
| SHA256:               | a3feb5265e6d02710f04ff618e966e9da9ba8fc8dc5692d6<br>f7633fe0a3037b66  |
| SHA512:               | 9c023dc66d9bcfb2f5bc0274001d92948ac058fc8765d21<br>78907dfd8fb9885ede57acc3836d583ad97516dce1a97c5<br>0f081800b41a1f42ea938efb8b23e87567  |
| SSDEEP:               | 3072:+3BepJlZa/xao5JKwl7V4R4iUW/qcijw2HJlZapGB<br>R:EiUlo5JKPgU99vHP  |
| File Content Preview: | MZ@@  |
| File Icon             |   |

f8fcd4ccf4e4e8d0

### Static PE Info

| General                     |  |
|-----------------------------|--|
| Entrypoint:                 | 0x4019b0   |
| Entrypoint Section:         | .text  |
| Digitally signed:           | false  |
| Imagebase:                  | 0x400000   |
| Subsystem:                  | windows gui  |
| Image File Characteristics: | LOCAL_SYMS_STRIPPED, 32BIT_MACHINE, EXECUTABLE_IMAGE,<br>LINE_NUMS_STRIPPED, RELOCS_STRIPPED |
| DLL Characteristics:        |  |
| Time Stamp:                 | 0x4EA15357 [Fri Oct 21 11:11:19 2011 UTC]  |
| TLS Callbacks:              |  |
| CLR (.Net) Version:         |  |
| OS Version Major:           | 4  |
| OS Version Minor:           | 0  |
| File Version Major:         | 4  |
| File Version Minor:         | 0  |
| Subsystem Version Major:    | 4  |
| Subsystem Version Minor:    | 0  |
| Import Hash:                | e9f7dd0da1a2a1266893e1ae4ef42b67   |

## **Entrypoint Preview**

### Data Directories

### Sections

| Name  | Virtual Address | Virtual Size | Raw Size | Xored PE | ZLIB Complexity | File Type | Entropy       | Characteristics  |
|-------|-----------------|--------------|----------|----------|-----------------|-----------|---------------|--|
| .text | 0x1000          | 0x318a4      | 0x32000  | False    | 0.39177734375   | data      | 6.3764832494  | IMAGE_SCN_MEM_EXECUTE,<br>IMAGE_SCN_CNT_CODE,<br>IMAGE_SCN_MEM_READ            |
| .data | 0x33000         | 0x1290       | 0x1000   | False    | 0.00634765625   | data      | 0.0           | IMAGE_SCN_CNT_INITIALIZED_DA<br>TA, IMAGE_SCN_MEM_WRITE,<br>IMAGE_SCN_MEM_READ |
| .rsrc | 0x35000         | 0x6d0a       | 0x7000   | False    | 0.481689453125  | data      | 5.46300019784 | IMAGE_SCN_CNT_INITIALIZED_DA<br>TA, IMAGE_SCN_MEM_READ                         |

#### Resources

### Imports

### Version Infos

### Possible Origin

| Language of compilation system | Country where language is spoken | Мар |
|--------------------------------|----------------------------------|-----|
| English                        | United States                    |     |

| Network Behavior          |  |
|---------------------------|--|
|                           |  |
| No network behavior found |  |

# **Code Manipulations**

## Statistics

# System Behavior

### Analysis Process: VZghv7yI7g.exe PID: 2256 Parent PID: 5616

### General

| Start time:                   | 18:35:02  |
|-------------------------------|---|
| Start date:                   | 19/07/2021  |
| Path:                         | C:\Users\user\Desktop\VZghv7yI7g.exe  |
| Wow64 process (32bit):        | true  |
| Commandline:                  | 'C:\Users\user\Desktop\VZghv7yl7g.exe'  |
| Imagebase:                    | 0x400000  |
| File size:                    | 241664 bytes  |
| MD5 hash:                     | 73BB5C4B690B8D6DF88D6BC18FB3A553  |
| Has elevated privileges:      | true  |
| Has administrator privileges: | true  |
| Programmed in:                | Visual Basic  |
| Yara matches:                 | <ul> <li>Rule: JoeSecurity_GuLoader_2, Description: Yara detected GuLoader, Source:<br/>00000000.00000002.756540382.000000002250000.00000040.00000001.sdmp, Author:<br/>Joe Security</li> </ul> |
| Reputation:                   | low   |
| File Activities               | Show Windows behavior   |

## Disassembly

### **Code Analysis**

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Joe Sandbox Cloud Basic 33.0.0 White Diamond