

JOeSandbox Cloud BASIC



**ID:** 531747

**Sample Name:** draft\_inv  
dec21.exe

**Cookbook:** default.jbs

**Time:** 10:21:21

**Date:** 01/12/2021

**Version:** 34.0.0 Boulder Opal

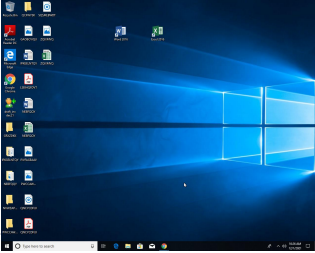
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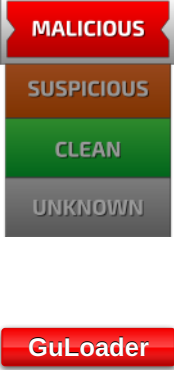
# Windows Analysis Report draft\_inv dec21.exe

## Overview

### General Information

|                              |                                                                                   |
|------------------------------|-----------------------------------------------------------------------------------|
| Sample Name:                 | draft_inv dec21.exe                                                               |
| Analysis ID:                 | 531747                                                                            |
| MD5:                         | 89a584acaeb2f9e.                                                                  |
| SHA1:                        | 263ff0b238d57cf...                                                                |
| SHA256:                      | 59ae017767f6a56.                                                                  |
| Infos:                       |  |
| Most interesting Screenshot: |  |

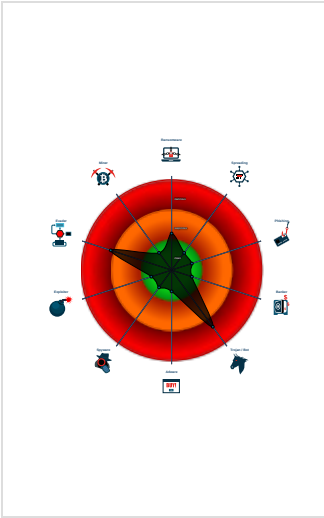
### Detection

|                                                                                   |         |
|-----------------------------------------------------------------------------------|---------|
|  |         |
| Score:                                                                            | 72      |
| Range:                                                                            | 0 - 100 |
| Whitelisted:                                                                      | false   |
| Confidence:                                                                       | 100%    |

### Signatures

|                                            |
|--------------------------------------------|
| Found malware configuration                |
| Multi AV Scanner detection for subm...     |
| Yara detected GuLoader                     |
| C2 URLs / IPs found in malware con...      |
| Found potential dummy code loops (...)     |
| Uses 32bit PE files                        |
| Sample file is different than original ... |
| PE file contains strange resources         |
| Contains functionality to read the PEB     |
| Uses code obfuscation techniques (...)     |
| Detected potential crypto function         |
| Monitors certain registry keys / valu...   |

### Classification



## Process Tree

- System is w10x64
-  draft\_inv dec21.exe (PID: 6976 cmdline: "C:\Users\user\Desktop\draft\_inv dec21.exe" MD5: 89A584ACAEB2F9E8BAF46714EB7D3550)
- cleanup

## Malware Configuration

Threatname: GuLoader

```
{
  "Payload URL": "https://statuswar.info/GHDFR/bin_r01FD0Aa61.bin"
}
```

## Yara Overview

### Memory Dumps

| Source                                                                   | Rule                   | Description            | Author       | Strings |
|--------------------------------------------------------------------------|------------------------|------------------------|--------------|---------|
| 00000000.00000002.1200998777.0000000002C<br>A0000.00000040.00000001.sdmp | JoeSecurity_GuLoader_2 | Yara detected 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

## Anti Debugging:

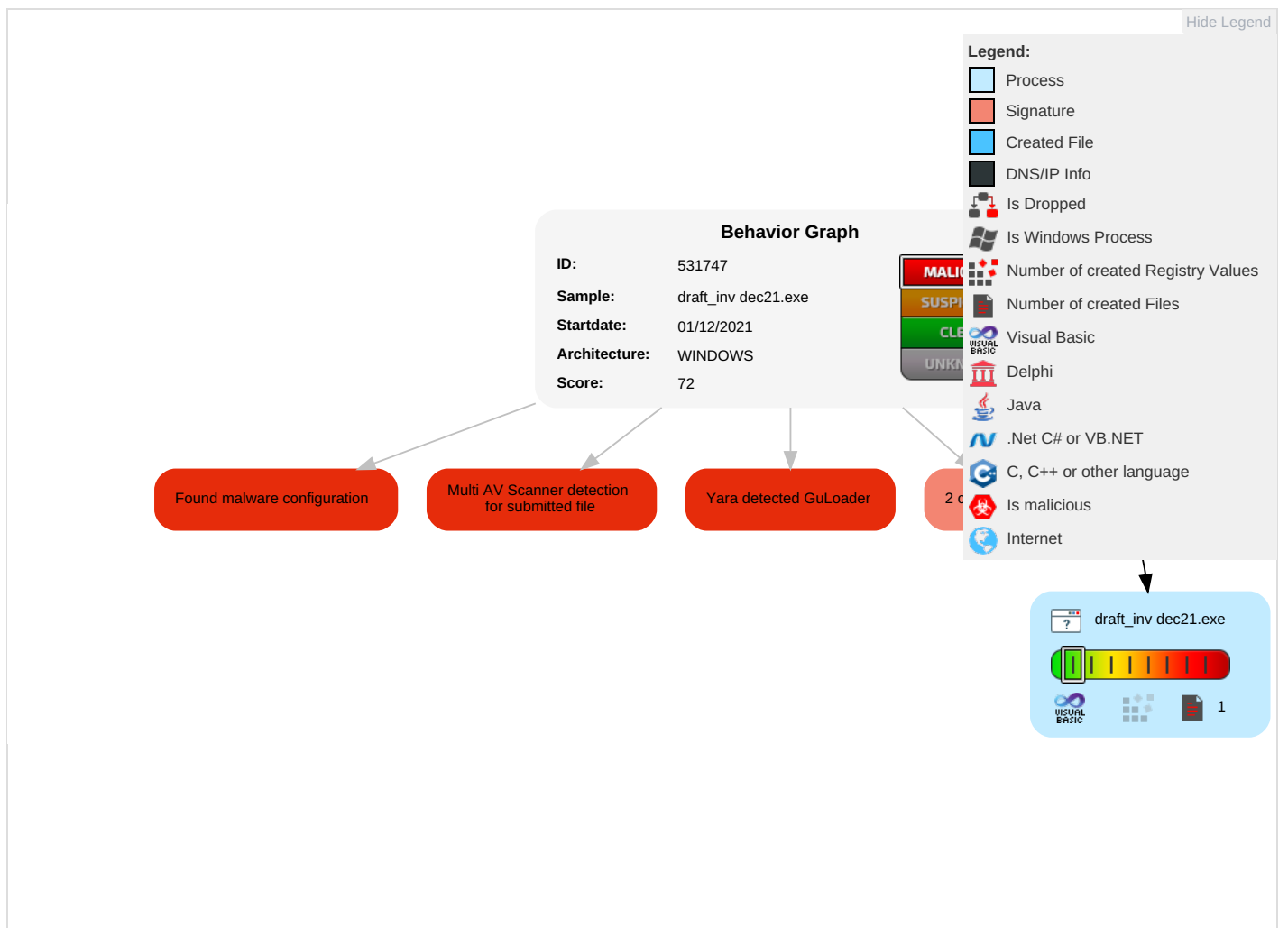


Found potential dummy code loops (likely to delay analysis)

## Mitre Att&ck Matrix

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

## 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       | Label                 | Link                   |
|---------------------|-----------|---------------|-----------------------|------------------------|
| draft_inv dec21.exe | 20%       | Metadefender  |                       | <a href="#">Browse</a> |
| draft_inv dec21.exe | 18%       | ReversingLabs | Win32.Trojan.GuLoader |                        |

### Dropped Files

No Antivirus matches

### Unpacked PE Files

No Antivirus matches

### Domains

No Antivirus matches

### URLs

| Source                                                                                                                      | Detection | Scanner         | Label | Link |
|-----------------------------------------------------------------------------------------------------------------------------|-----------|-----------------|-------|------|
| <a href="http://https://statuswar.info/GHDFR/bin_roIFDOAa61.bin">http://https://statuswar.info/GHDFR/bin_roIFDOAa61.bin</a> | 0%        | Avira URL Cloud | safe  |      |

## Domains and IPs

### Contacted Domains

No contacted domains info

### Contacted URLs

| Name                                                   | Malicious | Antivirus Detection                                                   | Reputation |
|--------------------------------------------------------|-----------|-----------------------------------------------------------------------|------------|
| http://https://statuswar.info/GHDFR/bin_rOIFDOAa61.bin | true      | <ul style="list-style-type: none"><li>Avira URL Cloud: safe</li></ul> | unknown    |

### Contacted IPs

No contacted IP infos

## General Information

|                                                    |                                                                                                                                                                                                                                         |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Joe Sandbox Version:                               | 34.0.0 Boulder Opal                                                                                                                                                                                                                     |
| Analysis ID:                                       | 531747                                                                                                                                                                                                                                  |
| Start date:                                        | 01.12.2021                                                                                                                                                                                                                              |
| Start time:                                        | 10:21:21                                                                                                                                                                                                                                |
| Joe Sandbox Product:                               | CloudBasic                                                                                                                                                                                                                              |
| Overall analysis duration:                         | 0h 7m 37s                                                                                                                                                                                                                               |
| Hypervisor based Inspection enabled:               | false                                                                                                                                                                                                                                   |
| Report type:                                       | light                                                                                                                                                                                                                                   |
| Sample file name:                                  | draft_inv dec21.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: | 13                                                                                                                                                                                                                                      |
| 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 style="list-style-type: none"><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:                                    | mal72.troj.evad.winEXE@1/1@0/0                                                                                                                                                                                                          |
| EGA Information:                                   | <ul style="list-style-type: none"><li>Successful, ratio: 100%</li></ul>                                                                                                                                                                 |
| HDC Information:                                   | <ul style="list-style-type: none"><li>Successful, ratio: 33.8% (good quality ratio 11.7%)</li><li>Quality average: 20.8%</li><li>Quality standard deviation: 32.3%</li></ul>                                                            |
| HCA Information:                                   | Failed                                                                                                                                                                                                                                  |
| Cookbook Comments:                                 | <ul style="list-style-type: none"><li>Adjust boot time</li><li>Enable AMSI</li><li>Found application associated with file extension: .exe</li><li>Override analysis time to 240s for sample files taking high CPU consumption</li></ul> |
| Warnings:                                          | Show All                                                                                                                                                                                                                                |

## Simulations

### Behavior and APIs

No simulations

Joe Sandbox View / Context

IPs

No context

Domains

No context

ASN

No context

JA3 Fingerprints

No context

Dropped Files

No context

Created / dropped Files

|                                                          |                                                                                                                                 |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| C:\Users\user\AppData\Local\Temp\~DF91089FF9233BF8CB.TMP |                                                                                                                                 |
| Process:                                                 | C:\Users\user\Desktop\draft_inv dec21.exe                                                                                       |
| File Type:                                               | Composite Document File V2 Document, Cannot read section info                                                                   |
| Category:                                                | dropped                                                                                                                         |
| Size (bytes):                                            | 16384                                                                                                                           |
| Entropy (8bit):                                          | 0.6374754921163319                                                                                                              |
| Encrypted:                                               | false                                                                                                                           |
| SSDEEP:                                                  | 12:rI3IKFQCb77z4cl9ZgFLGVwtn4+jbxO/37X6XMRZnAX3CqFZIUoz:r8JloFP1jbxOfLhIAX3CAZlj                                                |
| MD5:                                                     | 26F4DF069A76EC44D3497157CFC2A7FF                                                                                                |
| SHA1:                                                    | 4FFDEDEB83278CA75D0AAE246C6451342C6A763F                                                                                        |
| SHA-256:                                                 | B83265C7FB0E0239E55E32B503B9D73689FC800BCF26E8670284B2BCF805841B                                                                |
| SHA-512:                                                 | 161E06993EE630FC83DD0A17D0B2370FF69173EAD77E385A4396E5E921C2037A2547FBEF7CD3B9E605ABE1960C928C158CB9D6C6479A4BD232F5790574AD029 |
| Malicious:                                               | false                                                                                                                           |
| Reputation:                                              | low                                                                                                                             |
| Preview:                                                 | .....>.....<br>.....<br>.....<br>.....                                                                                          |

Static File Info

General

|                 |                                                                                                                                                                                                                                                                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| File type:      | PE32 executable (GUI) Intel 80386, for MS Windows                                                                                                                                                                                                                                                                                            |
| Entropy (8bit): | 5.94335884500492                                                                                                                                                                                                                                                                                                                             |
| TrID:           | <ul style="list-style-type: none"><li>Win32 Executable (generic) a (10002005/4) 99.15%</li><li>Win32 Executable Microsoft Visual Basic 6 (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: flic, fli, cel) (7/3) 0.00%</li></ul> |
| File name:      | draft_inv dec21.exe                                                                                                                                                                                                                                                                                                                          |
| File size:      | 135168                                                                                                                                                                                                                                                                                                                                       |

|                       |                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General</b>        |                                                                                                                                                                |
| MD5:                  | 89a584acaeb2f9e8baf46714eb7d3550                                                                                                                               |
| SHA1:                 | 263ff0b238d57cfc30492f8801530b9986dcae38                                                                                                                       |
| SHA256:               | 59ae017767f6a56eba79abdad1343cba3643744f4668b320c30fda283abdedf2                                                                                               |
| SHA512:               | 299b531915221fd0003e2f526c7ac529d948524a065dde767c4d638f4121cd62d3a70e67bca3c013baf79cf98f67d9f84b5097327dfdba2d4ffd4b10dc571241                               |
| SSDEEP:               | 3072:9U8lySFndx820q1KtKiNaoLbi/gRN1bmwADH:9UkSFd22j1KvfEgHJO                                                                                                   |
| File Content Preview: | MZ.....@.....!..L.!Th<br>is program cannot be run in DOS mode....\$......7b..s...s..<br>..s.....r...<!.v..E%.r...Richs.....PE..L...W..<br>aL.....0.....h.....@ |

**File Icon**

|                                                                                   |                  |
|-----------------------------------------------------------------------------------|------------------|
|  |                  |
| Icon Hash:                                                                        | 98989c98b8787c00 |

**Static PE Info**

|                             |                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------|
| <b>General</b>              |                                                                                           |
| Entrypoint:                 | 0x401668                                                                                  |
| Entrypoint Section:         | .text                                                                                     |
| Digitally signed:           | false                                                                                     |
| Imagebase:                  | 0x400000                                                                                  |
| Subsystem:                  | windows gui                                                                               |
| Image File Characteristics: | LOCAL_SYMS_STRIPPED, 32BIT_MACHINE, EXECUTABLE_IMAGE, LINE_NUMS_STRIPPED, RELOCS_STRIPPED |
| DLL Characteristics:        |                                                                                           |
| Time Stamp:                 | 0x4C61B357 [Tue Aug 10 20:15:19 2010 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:                | a7de590cc5b951bdfc15c3f8afbf7326                                                          |

**Entrypoint Preview**

**Data Directories**

**Sections**

| Name  | Virtual Address | Virtual Size | Raw Size | Xored PE | ZLIB Complexity | File Type | Entropy       | Characteristics                                                         |
|-------|-----------------|--------------|----------|----------|-----------------|-----------|---------------|-------------------------------------------------------------------------|
| .text | 0x1000          | 0x1d570      | 0x1e000  | False    | 0.558390299479  | data      | 6.27464824978 | IMAGE_SCN_MEM_EXECUTE, IMAGE_SCN_CNT_CODE, IMAGE_SCN_MEM_READ           |
| .data | 0x1f000         | 0x1a18       | 0x1000   | False    | 0.00634765625   | data      | 0.0           | IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_WRITE, IMAGE_SCN_MEM_READ |
| .rsrc | 0x21000         | 0x750        | 0x1000   | False    | 0.18310546875   | data      | 1.93536831113 | IMAGE_SCN_CNT_INITIALIZED_DATA, IMAGE_SCN_MEM_READ                      |

**Resources**

**Imports**

**Version Infos**

**Possible Origin**

|                                |                                  |     |
|--------------------------------|----------------------------------|-----|
| Language of compilation system | Country where language is spoken | Map |
|--------------------------------|----------------------------------|-----|

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

## Network Behavior

No network behavior found

## Code Manipulations

## Statistics

## System Behavior

Analysis Process: draft\_inv dec21.exe PID: 6976 Parent PID: 1556

### General

|                               |                                                                                                                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Start time:                   | 10:22:22                                                                                                                                                                                                                |
| Start date:                   | 01/12/2021                                                                                                                                                                                                              |
| Path:                         | C:\Users\user\Desktop\draft_inv dec21.exe                                                                                                                                                                               |
| Wow64 process (32bit):        | true                                                                                                                                                                                                                    |
| Commandline:                  | "C:\Users\user\Desktop\draft_inv dec21.exe"                                                                                                                                                                             |
| Imagebase:                    | 0x400000                                                                                                                                                                                                                |
| File size:                    | 135168 bytes                                                                                                                                                                                                            |
| MD5 hash:                     | 89A584ACAEB2F9E8BAF46714EB7D3550                                                                                                                                                                                        |
| Has elevated privileges:      | true                                                                                                                                                                                                                    |
| Has administrator privileges: | true                                                                                                                                                                                                                    |
| Programmed in:                | Visual Basic                                                                                                                                                                                                            |
| Yara matches:                 | <ul style="list-style-type: none"> <li>Rule: JoeSecurity_GuLoader_2, Description: Yara detected GuLoader, Source: 00000000.00000002.1200998777.0000000002CA0000.00000040.00000001.sdmp, Author: Joe Security</li> </ul> |
| Reputation:                   | low                                                                                                                                                                                                                     |

### File Activities

Show Windows behavior

## Disassembly

### Code Analysis