ID: 680655
Sample Name: bjC3JpJnc9
Cookbook:
defaultlinuxfilecookbook.jbs
Time: 23:32:01
Date: 08/08/2022
Version: 35.0.0 Citrine

Table of Contents

Linux Analysis Report

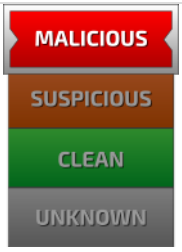
bjC3JpJnc9

Overview

General Information

Sample Name:	bjC3JpJnc9
Analysis ID:	680655
MD5:	a52f488cf3c6b6a..
SHA1:	721d21a1fbe6fa7.
SHA256:	1277da50206f90..
Tags:	32 arm elf mirai
Infos:	

Detection



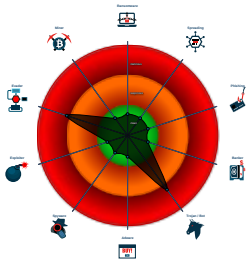
Mirai

Score:	68
Range:	0 - 100
Whitelisted:	false

Signatures

- Malicious sample detected (through…
- Yara detected Mirai
- Multi AV Scanner detection for subm…
- Sample is packed with UPX
- Sample contains only a LOAD segm…
- Yara signature match
- Uses the "uname" system call to qu…
- Tries to connect to HTTP servers, b…
- ELF contains segments with high en…

Classification



Analysis Advice

Static ELF header machine description suggests that the sample might not execute correctly on this machine.

All HTTP servers contacted by the sample do not answer. The sample is likely an old dropper which does no longer work.

Non-zero exit code suggests an error during the execution. Lookup the error code for hints.

Static ELF header machine description suggests that the sample might only run correctly on MIPS or ARM architectures.

General Information

Joe Sandbox Version:	35.0.0 Citrine
Analysis ID:	680655
Start date and time: 08/08/202223:32:01	2022-08-08 23:32:01 +02:00
Joe Sandbox Product:	CloudBasic
Overall analysis duration:	0h 5m 3s
Hypervisor based Inspection enabled:	false
Report type:	light
Sample file name:	bjC3JpJnc9
Cookbook file name:	defaultlinuxfilecookbook.jbs
Analysis system description:	Ubuntu Linux 20.04 x64 (Kernel 5.4.0-72, Firefox 91.0, Evince Document Viewer 3.36.10, LibreOffice 6.4.7.2, OpenJDK 11.0.11)
Analysis Mode:	default
Detection:	MAL
Classification:	mal68.troj.evad.lin@0/0@0/0

Runtime Messages

Command:	/tmp/bjC3JpJnc9
PID:	6235
Exit Code:	127
Exit Code Info:	
Killed:	False
Standard Output:	
Standard Error:	

Process Tree

- **system is lnxubuntu20**
  - bjC3JpJnc9 (PID: 6235, Parent: 6126, MD5: 5ebfcae4fe2471fcc5695c2394773ff1) Arguments: /tmp/bjC3JpJnc9
- **cleanup**

Yara Signatures

Memory Dumps

Source	Rule	Description	Author	Strings
6235.1.00007f79d4017000.00007f79d4026000.r-x.sdmp	JoeSecurity_Mirai_8	Yara detected Mirai	Joe Security	
6235.1.00007f79d4017000.00007f79d4026000.r-x.sdmp	Linux_Trojan_Gafgyt_28a2fe0c	unknown	unknown	• 0xdab0:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdac4:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdad8:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdaec:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb00:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb14:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb28:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb3c:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb50:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb64:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb78:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdb8c:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdba0:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdbb4:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdbc8:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdbdc:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdbf0:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdc04:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdc18:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdc2c:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0xdc40:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F
6235.1.00007f79d4017000.00007f79d4026000.r-x.sdmp	Linux_Trojan_Gafgyt_ea92cca8	unknown	unknown	• 0xe008:$a: 53 65 6C 66 20 52 65 70 20 46 75 63 6B 69 6E 67 20 4E 65 54 69 53 20 61 6E 64

Source	Rule	Description	Author	Strings
Process Memory Space: bjC3JpJnc9 PID: 6235	Linux_Trojan_Gafgyt_28a2fe0c	unknown	unknown	• 0x11f07:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f1b:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f2f:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f43:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f57:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f6b:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f7f:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11f93:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11fa7:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11fbb:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11fcf:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F • 0x11fe3:$a: 2F 78 33 38 2F 78 46 4A 2F 78 39 33 2F 78 49 44 2F 78 39 41 2F 78 33 38 2F 78 46 4A 2F

Snort Signatures

No Snort rule has matched

Joe Sandbox Signatures

AV Detection

Multi AV Scanner detection for submitted file

System Summary

Malicious sample detected (through community Yara rule)

Data Obfuscation

Sample is packed with UPX

Stealing of Sensitive Information

Yara detected Mirai

Remote Access Functionality

Yara detected Mirai

Mitre Att&ck Matrix

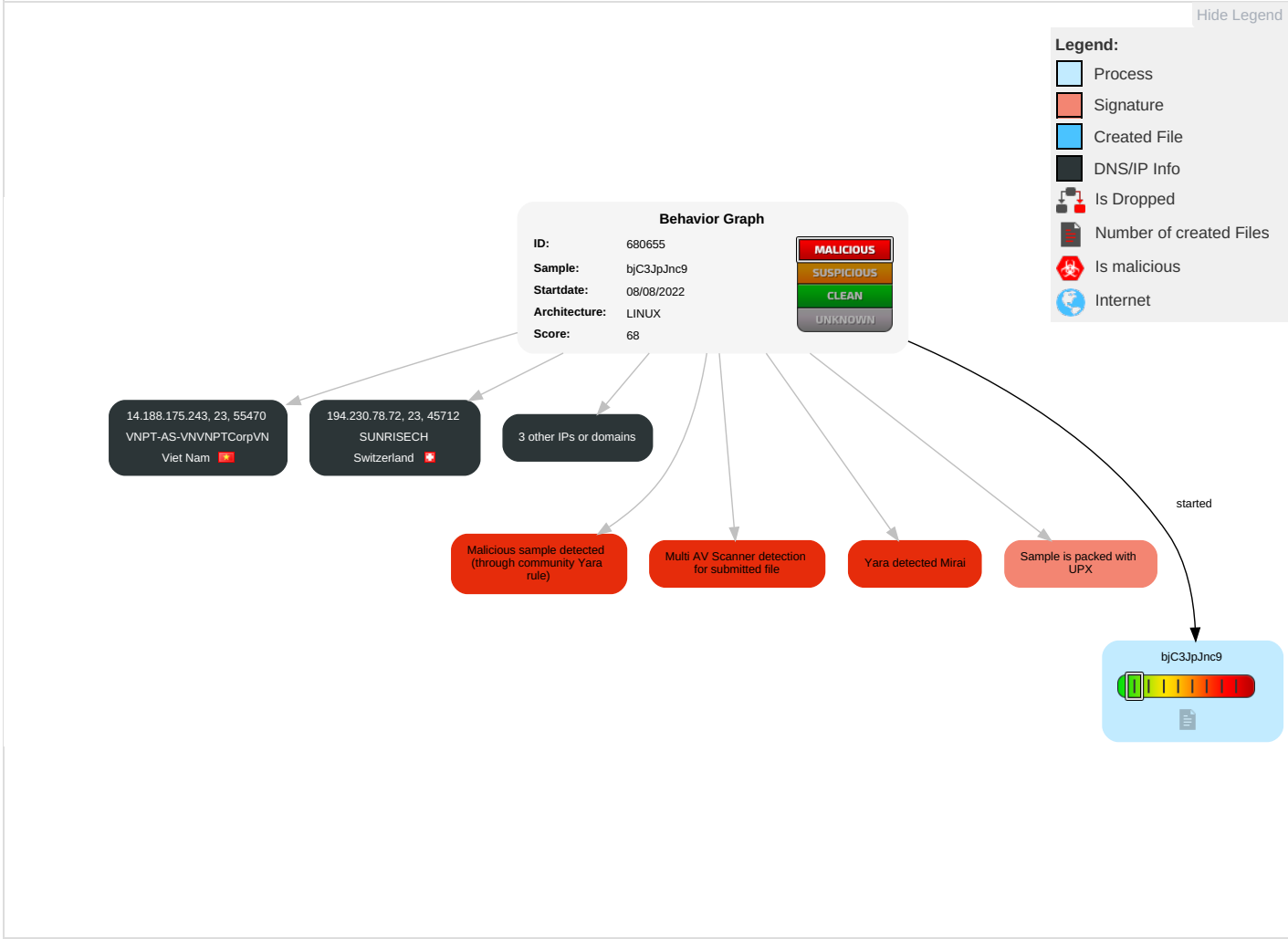
Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control	Network Effects	Remote Service Effects	Impact

Initial Access	Execution	Persistence	Privilege Escalation	Defense Evasion	Credential Access	Discovery	Lateral Movement	Collection	Exfiltration	Command and Control	Network Effects	Remote Service Effects	Impact
Valid Accounts	Windows Management Instrumentation	Path Interception	Path Interception	1 1 Obfuscated Files or Information	OS Credential Dumping	1 1 Security Software Discovery	Remote Services	Data from Local System	Exfiltration Over Other Network Medium	1 Encrypted Channel	Eavesdrop on Insecure Network Communication	Remotely Track Device Without Authorization	Modify System Partition
Default Accounts	Scheduled Task/Job	Boot or Logon Initialization Scripts	Boot or Logon Initialization Scripts	Rootkit	LSASS Memory	Application Window Discovery	Remote Desktop Protocol	Data from Removable Media	Exfiltration Over Bluetooth	1 Application Layer Protocol	Exploit SS7 to Redirect Phone Calls/SMS	Remotely Wipe Data Without Authorization	Device Lockout

Malware Configuration

No configs have been found

Behavior Graph



Antivirus, Machine Learning and Genetic Malware Detection

Initial Sample

Source	Detection	Scanner	Label	Link
bjC3JpJnc9	23%	Virustotal		Browse

Source	Detection	Scanner	Label	Link
bjC3JpJnc9	30%	ReversingLabs	Linux.Trojan.Mirai	

Dropped Files

No Antivirus matches

Domains

No Antivirus matches

URLs

No Antivirus matches

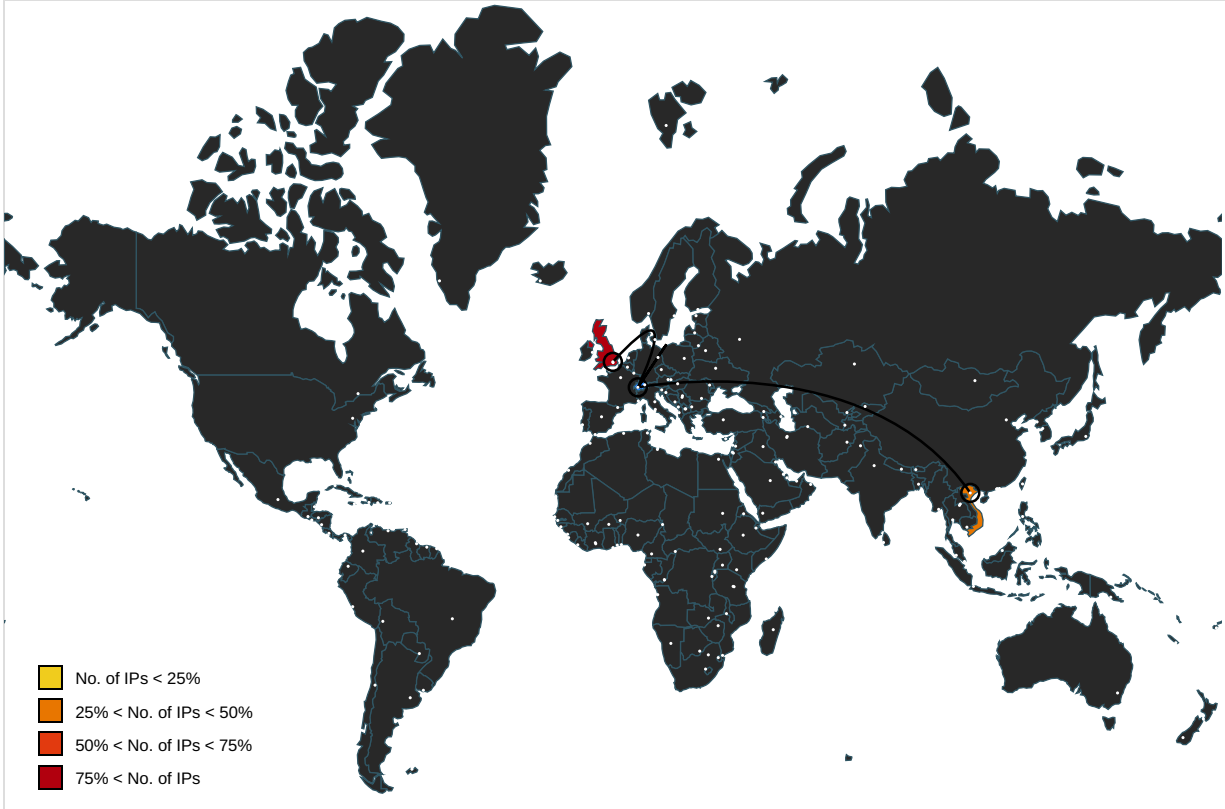
Domains and IPs

Contacted Domains

No contacted domains info

URLs from Memory and Binaries

World Map of Contacted IPs



Public IPs

IP	Domain	Country	Flag	ASN	ASN Name	Malicious
14.188.175.243	unknown	Viet Nam		45899	VNPT-AS-VNVNPTCorpVN	false
194.230.78.72	unknown	Switzerland		6730	SUNRISECH	false
109.202.202.202	unknown	Switzerland		13030	INIT7CH	false
91.189.91.43	unknown	United Kingdom		41231	CANONICAL-ASGB	false
91.189.91.42	unknown	United Kingdom		41231	CANONICAL-ASGB	false

Joe Sandbox View / Context

IPs

No context

Domains

No context

ASNs

No context

JA3 Fingerprints

No context

Dropped Files

No context

Created / dropped Files

No created / dropped files found

Static File Info

General

File type:	ELF 32-bit LSB executable, ARM, version 1 (ARM), statically linked, stripped
Entropy (8bit):	7.923688939000962
TrID:	• ELF Executable and Linkable format (generic) (4004/1) 100.00%
File name:	bjC3JpJnc9
File size:	23732
MD5:	a52f488cf3c6b6a99950e65c7b8d1221
SHA1:	721d21a1fbe6fa7f8e3f8bd080336348b837c1e7
SHA256:	1277da50206f90cd4c40097458c66def3f8f244b86db5173a1d403c73e3efe76
SHA512:	cbb773bc84b79f254de11bea27a1ec82b57355474d732c07ca1c194436b4552b0d07e5a5ab2277902646d83d2416029c5586942d4705ca67fb865328075b2dbd
SSDEEP:	384:gZyxQXm61zKpBGJ0UPBO4EKfIXmd3ualjRYZD6hp3vK3hymdGUop5hK4:CDXNkEJy4EqLrIlzhY3s3UozY4
TLSH:	8BB2C080A384A975C0308872DF65C788F3EF837EA6DDB2B626500595738498F56BEB07
File Content Preview:	.ELF...a.....(.....4.....4. ...(.....?[..? [.....\o..\...\.....Q.td.....CvUPX!.....q.....?.E.h;.}...^....."y..K.5...J...U..gu...@~..&NT..W....9..a..8....! .g

Static ELF Info

ELF header

Class:	ELF32
Data:	2's complement, little endian
Version:	1 (current)
Machine:	ARM
Version Number:	0x1
Type:	EXEC (Executable file)
OS/ABI:	ARM - ABI
ABI Version:	0
Entry Point Address:	0xc990

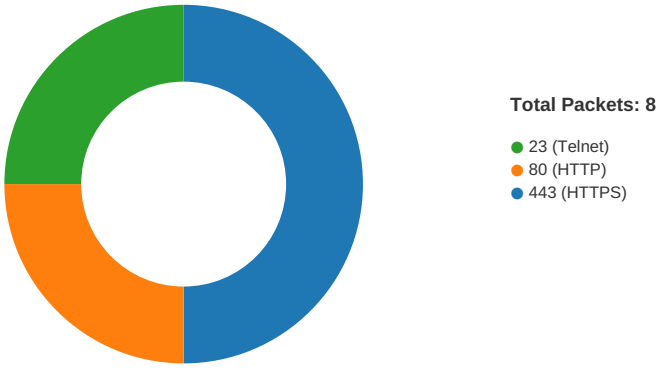
ELF header	
Flags:	0x2
ELF Header Size:	52
Program Header Offset:	52
Program Header Size:	32
Number of Program Headers:	3
Section Header Offset:	0
Section Header Size:	40
Number of Section Headers:	0
Header String Table Index:	0

Program Segments

Type	Offset	Virtual Address	Physical Address	File Size	Memory Size	Entropy	Flags	Flags Description	Align	Prog Interpreter	Section Mappings
LOAD	0x0	0x8000	0x8000	0x5b3f	0x5b3f	7.9267	0x5	R E	0x8000		
LOAD	0x6f5c	0x1ef5c	0x1ef5c	0x0	0x0	0.0000	0x6	RW	0x8000		
GNU_STACK	0x0	0x0	0x0	0x0	0x0	0.0000	0x7	RWE	0x4		

Network Behavior

Network Port Distribution



TCP Packets

System Behavior

Analysis Process: bjC3JpJnc9 PID: **6235**, Parent PID: **6126**

General

Start time:	23:32:47
Start date:	08/08/2022
Path:	/tmp/bjC3JpJnc9
Arguments:	/tmp/bjC3JpJnc9
File size:	4956856 bytes
MD5 hash:	5ebfcae4fe2471fcc5695c2394773ff1

File Activities

File Read