



NETMANAGEIT

Intelligence Report

GOLD MELODY: Profile of an Initial Access Broker

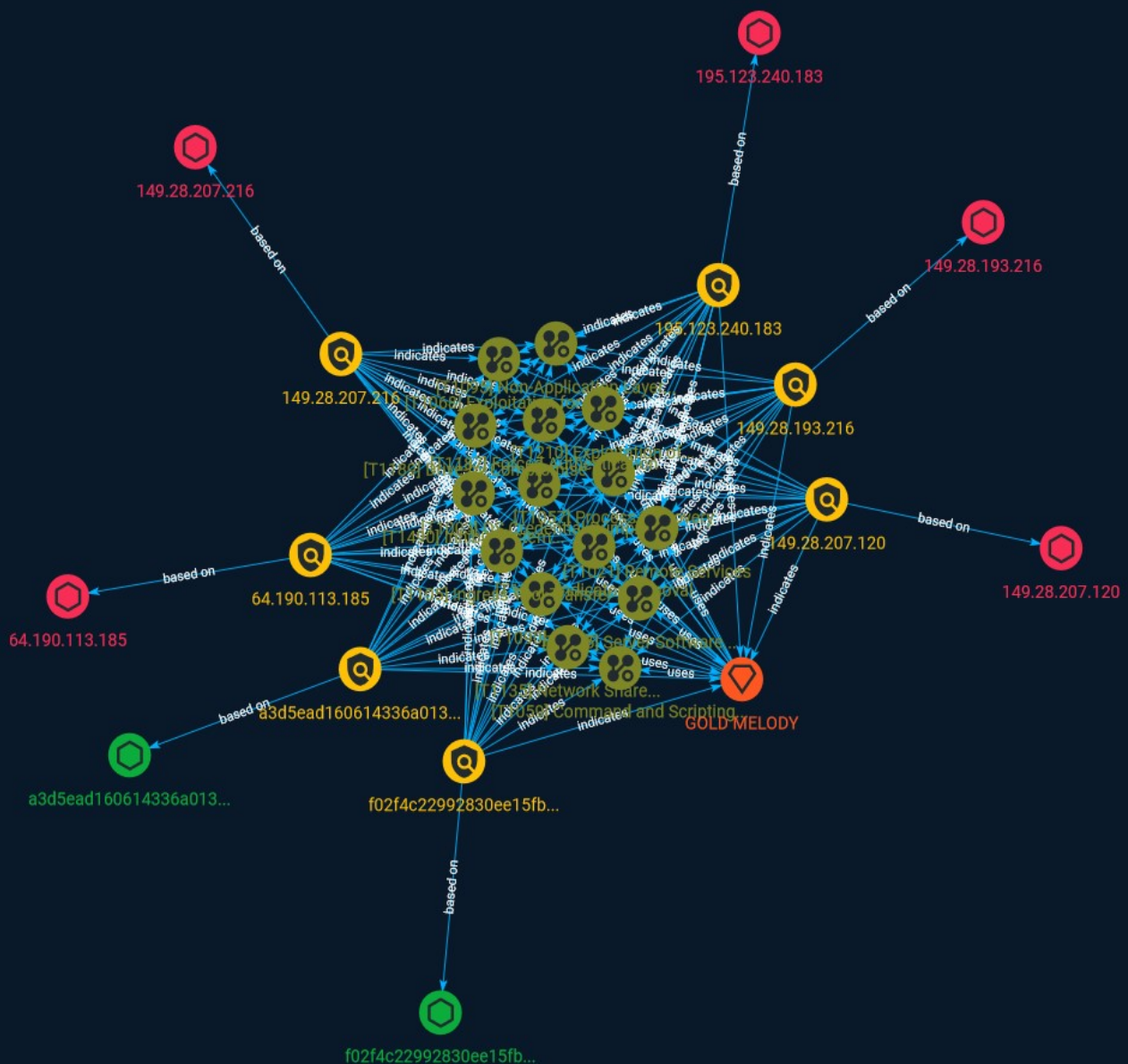


Table of contents

Overview

● Description	4
● Confidence	4
● Content	5

Entities

● Attack-Pattern	6
● Indicator	18
● Intrusion-Set	23

Observables

● StixFile	24
● IPv4-Addr	25



External References

- External References

26

Overview

Description

Secureworks® Counter Threat Unit™ (CTU) analysis indicates that the GOLD MELODY threat group acts as an initial access broker (IAB) that sells access to compromised organizations for other cybercriminals to exploit. This financially motivated group has been active since at least 2017, compromising organizations by exploiting vulnerabilities in unpatched internet-facing servers. The victimology suggests opportunistic attacks for financial gain rather a targeted campaign conducted by a state-sponsored threat group for espionage, destruction, or disruption.

Confidence

This value represents the confidence in the correctness of the data contained within this report.

15 / 100

Content

N/A

Attack-Pattern

Name

Process Discovery

ID

T1057

Description

Adversaries may attempt to get information about running processes on a system. Information obtained could be used to gain an understanding of common software/ applications running on systems within the network. Adversaries may use the information from [Process Discovery](https://attack.mitre.org/techniques/T1057) during automated discovery to shape follow-on behaviors, including whether or not the adversary fully infects the target and/or attempts specific actions. In Windows environments, adversaries could obtain details on running processes using the [Tasklist](https://attack.mitre.org/software/S0057) utility via [cmd](https://attack.mitre.org/software/S0106) or `Get-Process` via [PowerShell](https://attack.mitre.org/techniques/T1059/001). Information about processes can also be extracted from the output of [Native API](https://attack.mitre.org/techniques/T1106) calls such as `CreateToolhelp32Snapshot`. In Mac and Linux, this is accomplished with the `ps` command. Adversaries may also opt to enumerate processes via `/proc`. On network devices, [Network Device CLI](https://attack.mitre.org/techniques/T1059/008) commands such as `show processes` can be used to display current running processes.(Citation: US-CERT-TA18-106A)(Citation: show_processes_cisco_cmd)

Name

OS Credential Dumping

ID

T1003

Description

Adversaries may attempt to dump credentials to obtain account login and credential material, normally in the form of a hash or a clear text password, from the operating system and software. Credentials can then be used to perform [Lateral Movement](<https://attack.mitre.org/tactics/TA0008>) and access restricted information. Several of the tools mentioned in associated sub-techniques may be used by both adversaries and professional security testers. Additional custom tools likely exist as well.

Name

Forced Authentication

ID

T1187

Description

Adversaries may gather credential material by invoking or forcing a user to automatically provide authentication information through a mechanism in which they can intercept. The Server Message Block (SMB) protocol is commonly used in Windows networks for authentication and communication between systems for access to resources and file sharing. When a Windows system attempts to connect to an SMB resource it will automatically attempt to authenticate and send credential information for the current user to the remote system. (Citation: Wikipedia Server Message Block) This behavior is typical in enterprise environments so that users do not need to enter credentials to access network resources. Web Distributed Authoring and Versioning (WebDAV) is also typically used by Windows systems as a backup protocol when SMB is blocked or fails. WebDAV is an extension of HTTP and will typically operate over TCP ports 80 and 443. (Citation: Didier Stevens WebDAV Traffic) (Citation: Microsoft Managing WebDAV Security) Adversaries may take advantage of this behavior to gain access to user account hashes through forced SMB/WebDAV authentication. An adversary can send an attachment to a user through spearphishing that contains a resource link to an external server controlled by the adversary (i.e. [Template Injection](<https://attack.mitre.org/techniques/T1221>)), or place a

specially crafted file on navigation path for privileged accounts (e.g. .SCF file placed on desktop) or on a publicly accessible share to be accessed by victim(s). When the user's system accesses the untrusted resource it will attempt authentication and send information, including the user's hashed credentials, over SMB to the adversary controlled server. (Citation: GitHub Hashjacking) With access to the credential hash, an adversary can perform off-line [Brute Force](<https://attack.mitre.org/techniques/T1110>) cracking to gain access to plaintext credentials. (Citation: Cylance Redirect to SMB) There are several different ways this can occur. (Citation: Osanda Stealing NetNTLM Hashes) Some specifics from in-the-wild use include: * A spearphishing attachment containing a document with a resource that is automatically loaded when the document is opened (i.e. [Template Injection](<https://attack.mitre.org/techniques/T1221>)). The document can include, for example, a request similar to `file:///remote address/Normal.dotm`` to trigger the SMB request. (Citation: US-CERT APT Energy Oct 2017) * A modified .LNK or .SCF file with the icon filename pointing to an external reference such as `\\remote address\pic.png`` that will force the system to load the resource when the icon is rendered to repeatedly gather credentials. (Citation: US-CERT APT Energy Oct 2017)

Name

Indicator Removal

ID

T1070

Description

Adversaries may delete or modify artifacts generated within systems to remove evidence of their presence or hinder defenses. Various artifacts may be created by an adversary or something that can be attributed to an adversary's actions. Typically these artifacts are used as defensive indicators related to monitored events, such as strings from downloaded files, logs that are generated from user actions, and other data analyzed by defenders. Location, format, and type of artifact (such as command or login history) are often specific to each platform. Removal of these indicators may interfere with event collection, reporting, or other processes used to detect intrusion activity. This may compromise the integrity of security solutions by causing notable events to go unreported. This activity may also impede forensic analysis and incident response, due to lack of sufficient data to determine what occurred.

Name

Inhibit System Recovery

ID

T1490

Description

Adversaries may delete or remove built-in data and turn off services designed to aid in the recovery of a corrupted system to prevent recovery.(Citation: Talos Olympic Destroyer 2018) (Citation: FireEye WannaCry 2017) This may deny access to available backups and recovery options. Operating systems may contain features that can help fix corrupted systems, such as a backup catalog, volume shadow copies, and automatic repair features. Adversaries may disable or delete system recovery features to augment the effects of [Data Destruction](<https://attack.mitre.org/techniques/T1485>) and [Data Encrypted for Impact](<https://attack.mitre.org/techniques/T1486>).(Citation: Talos Olympic Destroyer 2018) (Citation: FireEye WannaCry 2017) Furthermore, adversaries may disable recovery notifications, then corrupt backups.(Citation: disable_notif_synology_ransom) A number of native Windows utilities have been used by adversaries to disable or delete system recovery features: * `vssadmin.exe` can be used to delete all volume shadow copies on a system - `vssadmin.exe delete shadows /all /quiet` * [Windows Management Instrumentation](<https://attack.mitre.org/techniques/T1047>) can be used to delete volume shadow copies - `wmic shadowcopy delete` * `wbadmin.exe` can be used to delete the Windows Backup Catalog - `wbadmin.exe delete catalog -quiet` * `bcdedit.exe` can be used to disable automatic Windows recovery features by modifying boot configuration data - `bcdedit.exe /set {default} bootstatuspolicy ignoreallfailures & bcdedit /set {default} recoveryenabled no` * `REAgentC.exe` can be used to disable Windows Recovery Environment (WinRE) repair/recovery options of an infected system On network devices, adversaries may leverage [Disk Wipe](<https://attack.mitre.org/techniques/T1561>) to delete backup firmware images and reformat the file system, then [System Shutdown/Reboot](<https://attack.mitre.org/techniques/T1529>) to reload the device. Together this activity may leave network devices completely inoperable and inhibit recovery operations. Adversaries may also delete “online” backups that are connected to their network – whether via network storage media or through folders that sync to cloud services.(Citation: ZDNet Ransomware Backups 2020) In cloud environments, adversaries may disable versioning and backup policies and delete snapshots, machine images, and prior versions of objects designed to be used in disaster recovery scenarios.(Citation: Dark Reading Code Spaces Cyber Attack)(Citation: Rhino Security Labs AWS S3 Ransomware)

Name

Exploitation of Remote Services

ID

T1210

Description

Adversaries may exploit remote services to gain unauthorized access to internal systems once inside of a network. Exploitation of a software vulnerability occurs when an adversary takes advantage of a programming error in a program, service, or within the operating system software or kernel itself to execute adversary-controlled code. A common goal for post-compromise exploitation of remote services is for lateral movement to enable access to a remote system. An adversary may need to determine if the remote system is in a vulnerable state, which may be done through [Network Service Discovery](<https://attack.mitre.org/techniques/T1046>) or other Discovery methods looking for common, vulnerable software that may be deployed in the network, the lack of certain patches that may indicate vulnerabilities, or security software that may be used to detect or contain remote exploitation. Servers are likely a high value target for lateral movement exploitation, but endpoint systems may also be at risk if they provide an advantage or access to additional resources. There are several well-known vulnerabilities that exist in common services such as SMB (Citation: CIS Multiple SMB Vulnerabilities) and RDP (Citation: NVD CVE-2017-0176) as well as applications that may be used within internal networks such as MySQL (Citation: NVD CVE-2016-6662) and web server services.(Citation: NVD CVE-2014-7169) Depending on the permissions level of the vulnerable remote service an adversary may achieve [Exploitation for Privilege Escalation](<https://attack.mitre.org/techniques/T1068>) as a result of lateral movement exploitation as well.

Name

Proxy

ID

T1090

Description

Adversaries may use a connection proxy to direct network traffic between systems or act as an intermediary for network communications to a command and control server to avoid direct connections to their infrastructure. Many tools exist that enable traffic redirection through proxies or port redirection, including [HTRAN](<https://attack.mitre.org/software/S0040>), ZXProxy, and ZXPortMap. (Citation: Trend Micro APT Attack Tools) Adversaries use these types of proxies to manage command and control communications, reduce the number of simultaneous outbound network connections, provide resiliency in the face of connection loss, or to ride over existing trusted communications paths between victims to avoid suspicion. Adversaries may chain together multiple proxies to further disguise the source of malicious traffic. Adversaries can also take advantage of routing schemes in Content Delivery Networks (CDNs) to proxy command and control traffic.

Name

Exploitation for Privilege Escalation

ID

T1068

Description

Adversaries may exploit software vulnerabilities in an attempt to elevate privileges. Exploitation of a software vulnerability occurs when an adversary takes advantage of a programming error in a program, service, or within the operating system software or kernel itself to execute adversary-controlled code. Security constructs such as permission levels will often hinder access to information and use of certain techniques, so adversaries will likely need to perform privilege escalation to include use of software exploitation to circumvent those restrictions. When initially gaining access to a system, an adversary may be operating within a lower privileged process which will prevent them from accessing certain resources on the system. Vulnerabilities may exist, usually in operating system components and software commonly running at higher permissions, that can be exploited to gain higher levels of access on the system. This could enable someone to move from unprivileged or user level permissions to SYSTEM or root permissions depending on the component that is vulnerable. This could also enable an adversary to move from a virtualized environment, such as within a virtual machine or container, onto the underlying host. This may be a necessary step for an adversary compromising an endpoint system that has been properly configured and limits other privilege escalation methods. Adversaries may bring a signed vulnerable driver onto a compromised machine so that they can exploit the vulnerability to execute code in kernel mode. This process is

sometimes referred to as Bring Your Own Vulnerable Driver (BYOVD).(Citation: ESET InvisiMole June 2020)(Citation: Unit42 AcidBox June 2020) Adversaries may include the vulnerable driver with files delivered during Initial Access or download it to a compromised system via [Ingress Tool Transfer](<https://attack.mitre.org/techniques/T1105>) or [Lateral Tool Transfer](<https://attack.mitre.org/techniques/T1570>).

Name

Server Software Component

ID

T1505

Description

Adversaries may abuse legitimate extensible development features of servers to establish persistent access to systems. Enterprise server applications may include features that allow developers to write and install software or scripts to extend the functionality of the main application. Adversaries may install malicious components to extend and abuse server applications.(Citation: volexity_0day_sophos_FW)

Name

Ingress Tool Transfer

ID

T1105

Description

Adversaries may transfer tools or other files from an external system into a compromised environment. Tools or files may be copied from an external adversary-controlled system to the victim network through the command and control channel or through alternate protocols such as [ftp](<https://attack.mitre.org/software/S0095>). Once present, adversaries may also transfer/spread tools between victim devices within a compromised environment (i.e. [Lateral Tool Transfer](<https://attack.mitre.org/techniques/T1570>)). Files can also be

transferred using various [Web Service](<https://attack.mitre.org/techniques/T1102>)s as well as native or otherwise present tools on the victim system.(Citation: PTSecurity Cobalt Dec 2016) On Windows, adversaries may use various utilities to download tools, such as `copy`, `finger`, `certutil`(<https://attack.mitre.org/software/S0160>), and [PowerShell](<https://attack.mitre.org/techniques/T1059/001>) commands such as `EX(New-Object Net.WebClient).downloadString()` and `Invoke-WebRequest`. On Linux and macOS systems, a variety of utilities also exist, such as `curl`, `scp`, `sftp`, `tftp`, `rsync`, `finger`, and `wget`. (Citation: t1105_lolbas)

Name

Non-Application Layer Protocol

ID

T1095

Description

Adversaries may use an OSI non-application layer protocol for communication between host and C2 server or among infected hosts within a network. The list of possible protocols is extensive.(Citation: Wikipedia OSI) Specific examples include use of network layer protocols, such as the Internet Control Message Protocol (ICMP), transport layer protocols, such as the User Datagram Protocol (UDP), session layer protocols, such as Socket Secure (SOCKS), as well as redirected/tunneled protocols, such as Serial over LAN (SOL). ICMP communication between hosts is one example.(Citation: Cisco Synful Knock Evolution) Because ICMP is part of the Internet Protocol Suite, it is required to be implemented by all IP-compatible hosts.(Citation: Microsoft ICMP) However, it is not as commonly monitored as other Internet Protocols such as TCP or UDP and may be used by adversaries to hide communications.

Name

Command and Scripting Interpreter

ID

T1059

Description

Adversaries may abuse command and script interpreters to execute commands, scripts, or binaries. These interfaces and languages provide ways of interacting with computer systems and are a common feature across many different platforms. Most systems come with some built-in command-line interface and scripting capabilities, for example, macOS and Linux distributions include some flavor of [Unix Shell](<https://attack.mitre.org/techniques/T1059/004>) while Windows installations include the [Windows Command Shell](<https://attack.mitre.org/techniques/T1059/003>) and [PowerShell](<https://attack.mitre.org/techniques/T1059/001>). There are also cross-platform interpreters such as [Python](<https://attack.mitre.org/techniques/T1059/006>), as well as those commonly associated with client applications such as [JavaScript](<https://attack.mitre.org/techniques/T1059/007>) and [Visual Basic](<https://attack.mitre.org/techniques/T1059/005>). Adversaries may abuse these technologies in various ways as a means of executing arbitrary commands. Commands and scripts can be embedded in [Initial Access](<https://attack.mitre.org/tactics/TA0001>) payloads delivered to victims as lure documents or as secondary payloads downloaded from an existing C2. Adversaries may also execute commands through interactive terminals/shells, as well as utilize various [Remote Services](<https://attack.mitre.org/techniques/T1021>) in order to achieve remote Execution. (Citation: Powershell Remote Commands)(Citation: Cisco IOS Software Integrity Assurance - Command History)(Citation: Remote Shell Execution in Python)

Name

Drive-by Compromise

ID

T1189

Description

Adversaries may gain access to a system through a user visiting a website over the normal course of browsing. With this technique, the user's web browser is typically targeted for exploitation, but adversaries may also use compromised websites for non-exploitation behavior such as acquiring [Application Access Token](<https://attack.mitre.org/techniques/T1550/001>). Multiple ways of delivering exploit code to a browser exist (i.e., [Drive-by Target](<https://attack.mitre.org/techniques/T1608/004>)), including: * A legitimate website is compromised where adversaries have injected some form of malicious code such as JavaScript, iFrames, and cross-site scripting * Script files served to a legitimate

website from a publicly writeable cloud storage bucket are modified by an adversary * Malicious ads are paid for and served through legitimate ad providers (i.e., [Malvertising] (<https://attack.mitre.org/techniques/T1583/008>)) * Built-in web application interfaces are leveraged for the insertion of any other kind of object that can be used to display web content or contain a script that executes on the visiting client (e.g. forum posts, comments, and other user controllable web content). Often the website used by an adversary is one visited by a specific community, such as government, a particular industry, or region, where the goal is to compromise a specific user or set of users based on a shared interest. This kind of targeted campaign is often referred to a strategic web compromise or watering hole attack. There are several known examples of this occurring.(Citation: Shadowserver Strategic Web Compromise) Typical drive-by compromise process: 1. A user visits a website that is used to host the adversary controlled content. 2. Scripts automatically execute, typically searching versions of the browser and plugins for a potentially vulnerable version. * The user may be required to assist in this process by enabling scripting or active website components and ignoring warning dialog boxes. 3. Upon finding a vulnerable version, exploit code is delivered to the browser. 4. If exploitation is successful, then it will give the adversary code execution on the user's system unless other protections are in place. * In some cases a second visit to the website after the initial scan is required before exploit code is delivered. Unlike [Exploit Public-Facing Application](<https://attack.mitre.org/techniques/T1190>), the focus of this technique is to exploit software on a client endpoint upon visiting a website. This will commonly give an adversary access to systems on the internal network instead of external systems that may be in a DMZ. Adversaries may also use compromised websites to deliver a user to a malicious application designed to [Steal Application Access Token](<https://attack.mitre.org/techniques/T1528>), like OAuth tokens, to gain access to protected applications and information. These malicious applications have been delivered through popups on legitimate websites.(Citation: Volexity OceanLotus Nov 2017)

Name

Remote Services

ID

T1021

Description

Adversaries may use [Valid Accounts](<https://attack.mitre.org/techniques/T1078>) to log into a service that accepts remote connections, such as telnet, SSH, and VNC. The adversary may then perform actions as the logged-on user. In an enterprise environment,

servers and workstations can be organized into domains. Domains provide centralized identity management, allowing users to login using one set of credentials across the entire network. If an adversary is able to obtain a set of valid domain credentials, they could login to many different machines using remote access protocols such as secure shell (SSH) or remote desktop protocol (RDP). (Citation: SSH Secure Shell) (Citation: TechNet Remote Desktop Services) They could also login to accessible SaaS or IaaS services, such as those that federate their identities to the domain. Legitimate applications (such as [Software Deployment Tools] (<https://attack.mitre.org/techniques/T1072>) and other administrative programs) may utilize [Remote Services] (<https://attack.mitre.org/techniques/T1021>) to access remote hosts. For example, Apple Remote Desktop (ARD) on macOS is native software used for remote management. ARD leverages a blend of protocols, including [VNC] (<https://attack.mitre.org/techniques/T1021/005>) to send the screen and control buffers and [SSH] (<https://attack.mitre.org/techniques/T1021/004>) for secure file transfer. (Citation: Remote Management MDM macOS) (Citation: Kickstart Apple Remote Desktop commands) (Citation: Apple Remote Desktop Admin Guide 3.3) Adversaries can abuse applications such as ARD to gain remote code execution and perform lateral movement. In versions of macOS prior to 10.14, an adversary can escalate an SSH session to an ARD session which enables an adversary to accept TCC (Transparency, Consent, and Control) prompts without user interaction and gain access to data. (Citation: FireEye 2019 Apple Remote Desktop) (Citation: Lockboxx ARD 2019) (Citation: Kickstart Apple Remote Desktop commands)

Name

Network Share Discovery

ID

T1135

Description

Adversaries may look for folders and drives shared on remote systems as a means of identifying sources of information to gather as a precursor for Collection and to identify potential systems of interest for Lateral Movement. Networks often contain shared network drives and folders that enable users to access file directories on various systems across a network. File sharing over a Windows network occurs over the SMB protocol. (Citation: Wikipedia Shared Resource) (Citation: TechNet Shared Folder) [Net] (<https://attack.mitre.org/software/S0039>) can be used to query a remote system for available shared drives using the ``net view \\\\remotesystem`` command. It can also be used to

query shared drives on the local system using ``net share``. For macOS, the ``sharing -l`` command lists all shared points used for smb services.

Indicator

Name

64.190.113.185

Description

ISP: BL Networks **OS:** Windows (Build 10.0.19041) -----
 Hostnames: ----- Domains: ----- Services: **3389:** ~~~
 Remote Desktop Protocol
 \x03\x00\x00\x13\x0e\xd0\x00\x00\x124\x00\x02\x1f\x08\x00\x02\x00\x00\x00 Remote
 Desktop Protocol NTLM Info: OS: Windows 10/Windows Server (version 2004) OS Build:
 10.0.19041 Target Name: 64D997838664310 NetBIOS Domain Name: 64D997838664310
 NetBIOS Computer Name: 64D997838664310 DNS Domain Name: 64d997838664310 FQDN:
 64d997838664310 ~~~ -----

Pattern Type

stix

Pattern

[ipv4-addr:value = '64.190.113.185']

Name

149.28.193.216

Description

```

**ISP:** The Constant Company, LLC **OS:** None ----- Hostnames: -
149.28.193.216.vultrusercontent.com ----- Domains: -
vultrusercontent.com ----- Services: **22:** ~ SSH-2.0-OpenSSH_8.7 Key
type: ssh-rsa Key: AAAAB3NzaC1yc2EAAAADAQABAAQGCs3EWnkPt/
crYQCQON74hTzkwmUUNZUfgzHsqz0xP9RRJk0 4M1lPCvMGXAgCWaJ7Y2ZjsHIZ/
FrKevglIGZyizrZnmRIXIb9vxGh5yy3coGAG3+bCzervv3Pd31 6EVfs7UwGFF/
QPLErr+4iBqo+1n2/55XAkDZaymr4+YGHVGOiOxXooSPCOh/d9zhNI5XZrt+i8xP 4hEo/
u4kzN1+bcAVENTk6q1nFcluAw4iLNv5gM7BeqjfAnAS+UZfXfnzmNposL4yaMd4OhBsAjdX
XrphTyxmyfhqNMu05qAXM/Z8YN6hMvnreKvNBocOY3ZZR1aaVAuoU0+apjU9EAb0j/ge9vzZ/
Q2y
VxvHWKUnYtcDc3T+oQAooavNjvbXlNPF4JoXA9ikkAbZio5ZPqGcZXtNj00g85qeak0LT8Kn3Qlo
AM22hIRcPt9gHUWgdZMe1jIubTR+UnWoLJNyuI88mFmN6mkq8VDGVtoA+cuxJTFvit24jQkQlbez
VZMhyUZi8gc= Fingerprint: e4:44:60:a0:bf:ed:94:6f:cf:c6:d3:37:46:03:23:71 Kex Algorithms:
curve25519-sha256 curve25519-sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384
ecdh-sha2-nistp521 diffie-hellman-group-exchange-sha256 diffie-hellman-group14-sha256
diffie-hellman-group16-sha512 diffie-hellman-group18-sha512 diffie-hellman-group-
exchange-sha1 diffie-hellman-group14-sha1 Server Host Key Algorithms: rsa-sha2-512 rsa-
sha2-256 ssh-rsa ecdsa-sha2-nistp256 ssh-ed25519 Encryption Algorithms: aes256-
gcm@openssh.com chacha20-poly1305@openssh.com aes256-ctr aes128-
gcm@openssh.com aes128-ctr MAC Algorithms: hmac-sha2-256-etm@openssh.com hmac-
sha1-etm@openssh.com umac-128-etm@openssh.com hmac-sha2-512-etm@openssh.com
hmac-sha2-256 hmac-sha1 umac-128@openssh.com hmac-sha2-512 Compression
Algorithms: none zlib@openssh.com ~ ----- **443:** ~ 0$
\x02\x01\x00x\x1f\n\x01T\x04\x00\x04\x00\x8a\x161.3.6.1.4.1.1466.20036 ~
-----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '149.28.193.216']

Name

f02f4c22992830ee15fba7a4fbf9f26ae7942dffdc98b9e32f1ec30e8e00c1f4

Description

TEL:Trojan:Win64/GoCLR.MR!MTB SHA256 of 711552fff3830d8e1bf99ff745b91b32

Pattern Type

stix

Pattern

[file:hashes!'SHA-256' =
'f02f4c22992830ee15fba7a4fbf9f26ae7942dffdc98b9e32f1ec30e8e00c1f4']

Name

149.28.207.216

Description

ISP: The Constant Company, LLC **OS:** None ----- Hostnames: -
149.28.207.216.vultrusercontent.com ----- Domains: -
vultrusercontent.com ----- Services: **5060:** SIP/2.0 200 OK Via: SIP/
2.0/UDP nm;branch=foo;received=224.69.228.30;rport=26810 From: ;tag=root To: ;tag=as3c2d
d699 Call-ID: 50000 CSeq: 42 OPTIONS Server: FPBX-15.0.37.1(16.30.0) Allow: INVITE, ACK,
CANCEL, OPTIONS, BYE, REFER, SUBSCRIBE, NOTIFY, INFO, PUBLISH, MESSAGE Supported:
replaces, timer Contact: Accept: application/sdp Content-Length: 0 -----

Pattern Type

stix

Pattern

[ipv4-addr:value = '149.28.207.216']

Name

149.28.207.120

Description

ISP: The Constant Company, LLC **OS:** None ----- Hostnames: -
149.28.207.120.vultrusercontent.com ----- Domains: -
vultrusercontent.com ----- Services: **80:** ~~~ HTTP/1.1 200 OK Server:
nginx/1.20.1 Date: Fri, 22 Sep 2023 09:32:56 GMT Content-Type: application/json;
charset=utf-8 Content-Length: 59 access-control-allow-origin: * etag: W/"3b-
hTYr3CxGxd5uSPEVYskedNzzN2o" ~~~ -----

Pattern Type

stix

Pattern

[ipv4-addr:value = '149.28.207.120']

Name

a3d5ead160614336a013f5de4cff65a5198b1d73238a5b456f558e70b503f52e

Description

Cabinet_Archive SHA256 of 687157882f603897bf6d358d49a12064

Pattern Type

stix

Pattern

[file:hashes:'SHA-256' =
'a3d5ead160614336a013f5de4cff65a5198b1d73238a5b456f558e70b503f52e']

Name

195.123.240.183

Description

```

**ISP:** GREEN FLOID LLC **OS:** None ----- Hostnames: -
vds1094676.hosted-by-itldc.com ----- Domains: - hosted-by-itldc.com
----- Services: **22:** `` SSH-2.0-OpenSSH_8.0 Key type: ssh-rsa Key:
AAAAB3NzaC1yc2EAAAADAQABAAQgQDwi6b4mKXIUUnY4mQ649NGnm32UU41WKiuydUJ+7S
N8mth aFLDcS84jRUPGiA6HYLgM3QQDOywGPUjkJ4C3YqGBdVP/
LxnCjlnqJjoyXwjeJLna68IqOZ10he
2xp+0J6qjpFVFKLvmKtbXJBdb8n6VXOQ2ZduaSu2EqK2vRg4ntgKvffslltorGD5VV50425uULyE
bxYe6KNd1bdeqrBwD+fia6EzDDWzY/7z7nTRA49sQMsKq8iW2MgVKuX2cFpmApAUifiM5YzyRrQn
cgLIFqtHmcVz15xPwLZpOUbkt7EKGtxZtbfKkIkEskTovMVK7/XFvMV5FFU3aOlbYrSL2UkPwZt
N0qY5yMPSa1GlmivH5+tkZt6d+ACv5iUQ5T95qobJdJHOVvVfx8heKICBXLz+T1hriOg5StuLWkP
yiQSo6SMknRaSKOcdZ6kzeO0IvVpvMeHPdLZMe0p946/
bFy69HeGirKWBCWAYnscOBRqGKif1bJ XeKC9zisYok= Fingerprint: 19:a7:36:a4:ac:12:d2:1f:
1a:d5:46:ac:eb:f6:f8:c7 Kex Algorithms: curve25519-sha256 curve25519-sha256@libssh.org
ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521 diffie-hellman-group-
exchange-sha256 diffie-hellman-group14-sha256 diffie-hellman-group16-sha512 diffie-
hellman-group18-sha512 diffie-hellman-group-exchange-sha1 diffie-hellman-group14-sha1
Server Host Key Algorithms: rsa-sha2-512 rsa-sha2-256 ssh-rsa ecdsa-sha2-nistp256 ssh-
ed25519 Encryption Algorithms: aes256-gcm@openssh.com chacha20-
poly1305@openssh.com aes256-ctr aes256-cbc aes128-gcm@openssh.com aes128-ctr
aes128-cbc MAC Algorithms: hmac-sha2-256-etm@openssh.com hmac-sha1-
etm@openssh.com umac-128-etm@openssh.com hmac-sha2-512-etm@openssh.com
hmac-sha2-256 hmac-sha1 umac-128@openssh.com hmac-sha2-512 Compression
Algorithms: none zlib@openssh.com `` -----

```

Pattern Type

stix

Pattern

[ipv4-addr:value = '195.123.240.183']

Intrusion-Set

Name

GOLD MELODY

StixFile

Value

a3d5ead160614336a013f5de4cff65a5198b1d73238a5b456f558e70b503f52e

f02f4c22992830ee15fba7a4fbf9f26ae7942dffdc98b9e32f1ec30e8e00c1f4

IPv4-Addr

Value

149.28.193.216

149.28.207.216

149.28.207.120

195.123.240.183

64.190.113.185

External References

-
- <https://otx.alienvault.com/pulse/6511e50028c3953453406132>
-
- <https://www.secureworks.com/research/gold-melody-profile-of-an-initial-access-broker>