VIRAV TECH





BASHE RANSOMWARE GROUP

FOREWORD

Bashe Ransomware group, which has received a lot of attention owing to its increasing targeting of businesses in a variety of industries. Bashe, previously known as Eraleign, is a ransomware group that emerged in early April 2024, adopting tactics like the LockBit group. Self-identifying as an "Advanced Persistent Threat" Bashe operates through a Tor-based Data Leak Site (DLS) to engage in double extortion, encrypting victims' files and threatening to release stolen data. The group primarily targets critical industries such as technology, financial services, customer services, and healthcare, in developed nations, including the United States, United Kingdom, Brazil, India, and France.

KEY FINDINGS:

- The report focuses on the Bashe ransomware group, an active and rapidly growing group that has experienced a surge in activity since 2024.
- ♦ Bashe encrypts sensitive files while threatening to leak data on their dark web data leak site (DLS) by leveraging double extortion tactics.
- The tactics and methods used by Bashe resemble established ransomware groups like LockBit, suggesting either emulation of LockBit or shared resources to gain credibility among cyber criminals.

BACKGROUND AND EVOLUTION

- Origins: BASHE emerged in April 2024 under the name APT73, initially positioning itself as an "Advanced Persistent Threat" to attract affiliates. The group rebranded in October 2024 to distance itself from LockBit's tarnished reputation post-Operation Cronos.
- ♠ Infrastructure: Hosts its Tor-based DLS on AS9009 (Czech Republic), a network historically linked to DarkAngels, Vice Society, and TrickBot.
- ♠ Affiliate Structure: Offers a profit-sharing model (80% to affiliates, 20% to BASHE) and enforces strict rules to prevent internal conflicts

The report highlights the importance of understanding the tactics, techniques, and procedures used by the Bashe ransomware group, as it enables it to enhance defense strategies and proactively protect against such ransomware attacks.



RODAN MAHARJAN

CYBER THREAT INTELLIGENCE

Rodan is a CTI Analyst at Vairav Tech, committed to making a meaningful impact in the field of cybersecurity by enhancing threat detection and defense strategies.

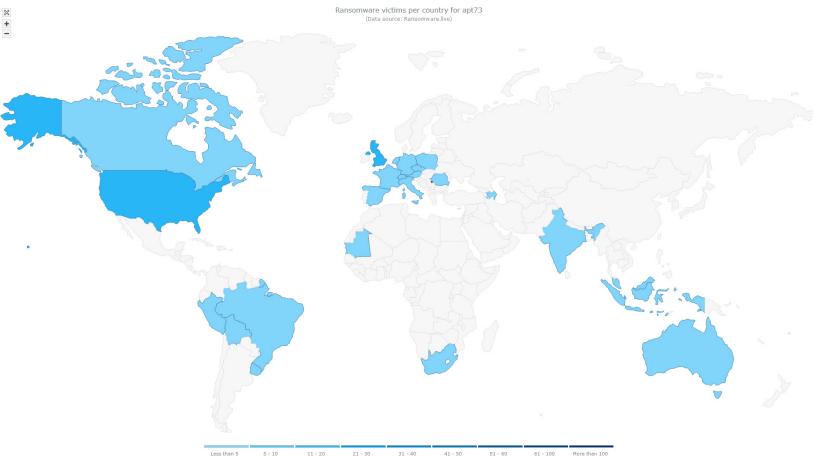


Figure 1: Ransomware Victim Worldmap Source: Ransomware.live.

As of January 27th, the Bashe ransomware group has been linked to a total of 71 attacks, predominantly targeting organizations in the United Kingdom, the United States, and Brazil. The group has launched a data leak site, where they self-identify as an APT.

Country	Number of Victims
UK	14
USA	12
BRAZIL	5
INDIA	5
FRMACE	4
SWITZERLAND	4

RECENT VICTIMS

Two recent victims of the Bashe attack group are MalindoAir.com from Bangladesh and ICICIBank.com from India. Both organizations have been given the option to pay to prevent further leaks.



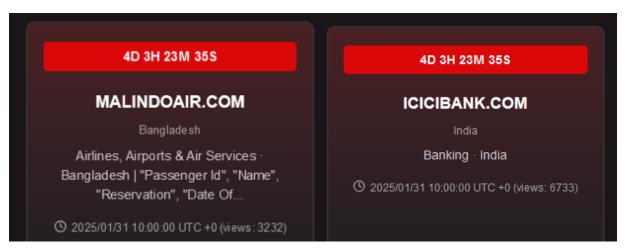


Figure 2: Latest Victims of Bashe Ransomware Group

Malindo Air: Operating in the airline and air services industry, has suffered a data breach exposing sensitive customer information, including Passenger IDs, names, reservation details, dates of birth, mobile numbers, passport details, and nationalities. The deadline for action to prevent further data exposure is set for January 31, 2025, at 10:00 UTC, with the breach already garnering 3,232 views.

ICICI Bank: A prominent banking institution in India, has experienced a breach of critical data, although the specific details of the exposed information are not mentioned. The deadline for this case is also January 31, 2025, at 10:00 UTC, with 6,733 views recorded so far.



TACTICS, TECHNIQUES, AND PROCEDURES

BASHE has focused on offering a service similar to a Data Leak Site-as-a-Service (DLSaaS), rather than following the traditional RaaS model. Unlike typical affiliate programs, BASHE does not provide its own ransomware. Instead, it relies on affiliates to handle encryption and upload stolen data to BASHE's platform. This model sets BASHE apart from other emerging threat actors, offering affiliates a more streamlined, service-oriented approach to extortion. By combining ransom negotiations, payment management, and secure communication tools while allowing affiliates the flexibility to choose their ransomware, BASHE has positioned itself as a standout player in the 2024 and 2025 cybercrime landscape.

The Bashe ransomware aka APT73 acquires early access to their victims' systems in various ways, including phishing emails, Trojan infections, exploiting weaknesses in software purchased from peer-to-peer (P2P) networks, etc. APT73 primarily conducts its attacks through phishing campaigns, leveraging tactics to exploit vulnerabilities in public-facing applications.

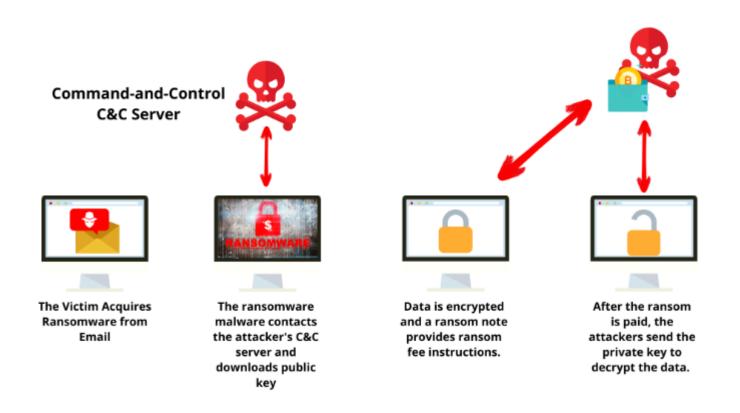


Figure 3: Infection chain of Ransomware.

Once access is gained, Bashe typically proceeds with data exfiltration and double extortion tactics. After encrypting the victim's systems, the group exfiltrates sensitive data, which they use as leverage to further their extortion efforts. They threaten to release this stolen data on their dark website unless the ransom demands are met, combining encryption with the potential exposure of sensitive information to intensify pressure on the victim.

Bashe's data leak site (DLS) is hosted on the dark web and is only accessible via Tor. However, in contrast to more established ransomware groups like LockBit, the site remains in its early stages. It lacks active mirrors, and only a single victim's data has been publicly leaked so far, suggesting that Bashe is still in the initial phase of its ransomware operations.

The site features an "About Us" section, which includes multiple posts written by external security researchers.

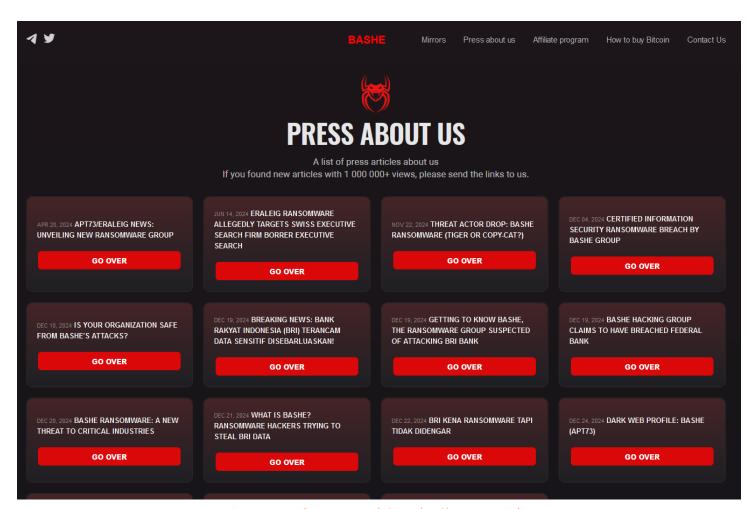


Figure 4: Bashe Data Leak Sites (DLS) Press Article Page

Additionally, the site lists the organizations they have compromised with, alongside data from those that have refused to comply with their ransom demands.



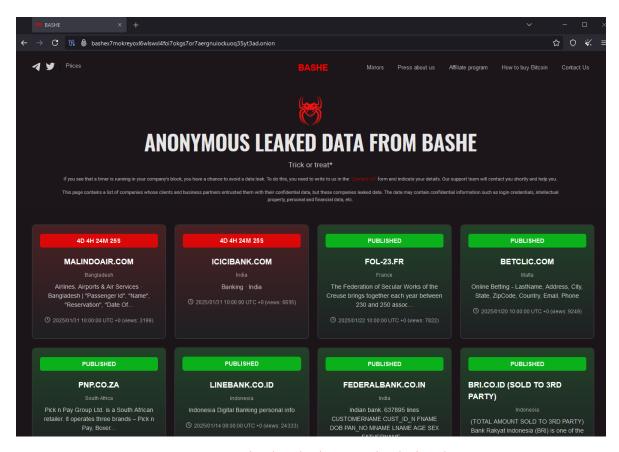


Figure 5: Bashe data leak site on the dark web.

The group has provided links to their Telegram and X (formerly Twitter) handles, which are as follows: [t.me/bashe_team_official] and [https://x.com/bashe_team].

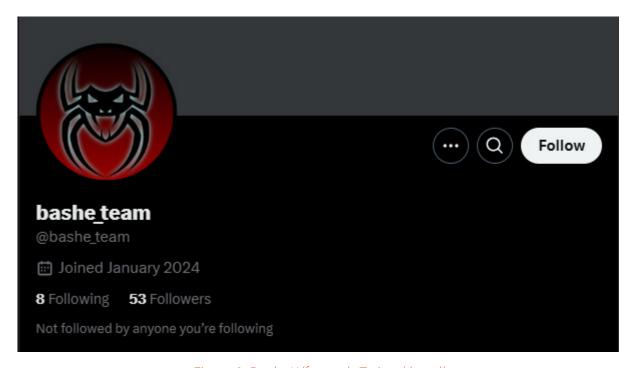


Figure 6: Bashe X (formerly Twitter) handle.





Figure 7: Bashe Telegram Channel.

From a technical perspective, Bashe's DLS is relatively rudimentary, reflecting the group's developmental stage. The platform is significantly less sophisticated than those of more established groups, with minimal data leaks and no active mirrors. The group relies extensively on the Tor network for hosting and data leaks, ensuring a high level of anonymity and complicating efforts to trace their activities.

When compared to LockBit, Bashe's tactics and methods show considerable similarities. Their DLS structure and attack techniques, including encryption and data exfiltration, mirror those used by LockBit. The two groups utilize similar layouts for their data leak sites, which may indicate that Bashe is either attempting to emulate LockBit or leveraging shared resources to establish credibility within the cybercriminal community.

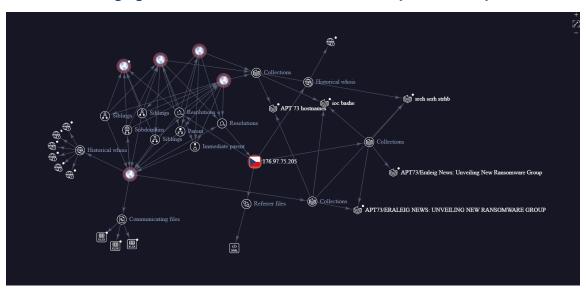


Figure 8: Bashe Network Infrastructure.



CYBER THREAT SUMMARY

Attribute	Details
Name	Bashe Ransomware
Threat Type	Ransomware
Detection Name	Bashe, APT73
Symptoms	The affected computer is unable to open files that were previously accessible. A message demanding ransom appears on the desktop, insisting on payment (usually in bitcoins) to regain access to the files.
Additional Information	Their DLS structure and attack techniques mirror those used by LockBit.
Distribution methods	Infected email attachments (macros), torrent websites, and malicious ads.
Damage	The encryption of all files renders them inaccessible until a ransom is paid. Alongside the ransomware infection, there is a possibility of additional installations of password-stealing Trojans and malware infections.
Malware Removal (Linux)	Conduct a thorough computer scan using trusted antivirus software.



MITRE ATT&CK TECHNIQUES

The Bashe ransomware gang makes the usage of various attack tactics, techniques, and procedures based on the MITRE ATT&CK framework to attack victimized users or organizations.

Tactic	Technique
Initial Access	Phishing (T1566)
	Exploit Public-Facing Application (T1190)
Execution	Command and Scripting Interpreter (T1059)
	PowerShell (T1059.001)
	Exploitation for Client Execution (T1203)
	Scheduled Task/Job (T1053)
Persistence	Scheduled Task (T1053.005)
	Boot or Logon AutoStart Execution (T1547)
	Registry Run Keys (T1547.001)
Privilege Escalation	Exploitation for Privilege Escalation (T1068)
	Abuse Elevation Control Mechanism(T1548)
	Bypass User Account Control (UAC) (T1548.002)
Defense Evasion	Process Injection (T1055)
	Impair Defenses (T1562)
	Disable or Modify Tools (T1562.001)
Discovery	Remote System Discovery (T1018)
	File and Directory Discovery (T10183)
	Process Discovery (T1057)
Lateral Movement	Remote Services (T1021)
	SMB/Windows Admin Shares (T1021.002)
Collection	Data from Local System (T1005)
	Data Staged (T1074)
	Local Data Staging (T1074.001)



INDICATOR OF COMPROMISE (IOC)

Туре	IOC
IP Address	701435e822a78b82d53281af3ffb20b3732462ec99c6f36afdfc6f8eed4123f9
	eraleignews[.]com
	ns4.eraleignews[.]com
Domains	ns3.eraleignews[.]com
	ns2.eraleignews[.]com
	ns1.eraleignews[.]com
TOR	qcgv5tfer4f46ns6ohh72zeyyh5uavoiybypzpt3lmwk5ecyqykptgqd.onion
TOX	9796CE1E72A8874D594F6573F44C94FB649473B4194DCD80C406BFE88E4B3662A375E78FB436
SHA-256	f1a00e2fe86455b9d1a384d5e96185e016816acd1d7ef3460e232e9ecb9da794
SHA-1	94895ed0dc352981fbec38b5348ec3ae3be26371
MD5	6d170d36a4d6b47987f51445b24e587c



DETECTION RULES

Initial Java Script Script Execution

```
title: Office Application Initiated Network Connection To Non-Local IP
id: 75e33ce3-ae32-4dcc-9aa8-a2a3029d6f84
status: test
description:
   Detects an office application (Word, Excel, PowerPoint) that initiates a network connection to a
non-private IP address.
  This rule aims to detect traffic similar to the one seen exploited in CVE-2021-42292.
  This rule will require an initial baseline and tuning that is specific to your organization.
References:
  https://corelight.com/blog/detecting-cve-2021-42292
                      https://learn.microsoft.com/de-de/microsoft-365/enterprise/urls-and-ip-address-
ranges?view=o365-worldwide
author: Christopher Peacock '@securepeacock', SCYTHE '@scythe_io', Florian Roth (Nextron Systems),
Tim Shelton, Nasreddine Bencherchali (Nextron Systems)
date: 2021-11-10
modified: 2024-07-02
Tags:

    attack.execution

 - attack.t1203
log source:
  category: network connection
 product: windows
Detection:
  Selection:
    Image endswith:
         ∖excel.exe'
      - '\outlook.exe'
        \powerpnt.exe'
      - '\winword.exe'
- '\wordview.exe'
    Initiated: 'true'
  filter_main_local_ranges:
    DestinationIp|cidr:
       - '127.0.0.0/8'
       - '10.0.0.0/8'
       - '172.16.0.0/12'
       - '192.168.0.0/16'
       - '169.254.0.0/16'
       - '::1/128' # IPv6 loopback
      - 'fe80::/10' # IPv6 link-local addresses
- 'fc00::/7' # IPv6 private addresses
  filter_main_msrange_generic:
    DestinationIp|cidr:
- '20.184.0.0/13' # Microsoft Corporation
- '20.192.0.0/10' # Microsoft Corporation
       - '23.72.0.0/13' # Akamai International B.V.
      - '40.76.0.0/14' # Microsoft Corporation
- '51.10.0.0/15' # Microsoft Corporation
      - '51.103.0.0/16' # Microsoft Corporation
   - '51.104.0.0/15' # Microsoft Corporation
- '51.142.136.0/22' # Microsoft Corporation - https://ipinfo.io/AS8075/51.140.0.0/14-51.142.136.0/22
        '52.160.0.0/11' # Microsoft Corporation - https://ipinfo.io/AS8075/52.160.0.0/11
```



```
204.79.197.0/24' # Microsoft Corporation
filter_main_msrange_exchange_1:
  # Exchange Online
    "urls": [
"outlook.cloud.microsoft",
"outlook.cloud.microsoft",
        "outlook.office.com",
  #
  #
        "outlook.office365.com"
  #]
  DestinationIp|cidr:
     - '13.107.6.152/31'
     - '13.107.18.10/31'
      '13.107.128.0/22'
      '23.103.160.0/20'
      '40.96.0.0/13'
      '40.104.0.0/15'
     - '52.96.0.0/14'
     - '131.253.33.215/32'
     - '132.245.0.0/16
     - '150.171.32.0/22'
     - '204.79.197.2<sup>′</sup>15/32'
     - '2603:1006::/40'
     - '2603:1016::ˈ/36'
      '2603:1026::/36'
      '2603:1036::/36'
'2603:1046::/36'
'2603:1056::/36'
      '2620:1ec:4::152/128'
      '2620:1ec:4::153/128'
      '2620:1ec:c::10/128'
    - '2620:1ec:d::11/128'
- '2620:1ec:d::10/128'
- '2620:1ec:d::11/128'
      '2620:1ec:8f0::/46'
     - '2620:1ec:900::/46'
     - '2620:1ec:a92::152/1<mark>28</mark>'
     - '2620:1ec:a92::153/128'
  DestinationPort:
    - 80
     - 443
filter_main_msrange_exchange_2:
# Exchange Online
    "urls":
  #
        "outlook.office365.com",
  #
        "smtp.office365.com"
  #]
  DestinationIp|cidr:
      '13.107.6.152/31'
     - '13.107.18.10/31'
      '13.107.128.0/22'
      '23.103.160.0/20'
      '40.96.0.0/13'
     - '40.104.0.0/15'
     - '52.96.0.0/14'
    - '131.253.33.215/32'
    - '132.245.0.0/16'
     - '150.171.32.0/22'
     - '204.79.197.215/32'
     - '2603:1006::/40'
     - '2603:1016::/36'
     - '2603:1026::/36'
      '<u>2</u>603:1036::/36'
```

```
- '2603:1046::/36'
      '2603:1056::/36'
      '2620:1ec:4::152/128'
      '2620:1ec:4::153/128'
      '2620:1ec:c::10/128'
'2620:1ec:c::11/128'
      '2620:1ec:d::10/128'
     - '2620:1ec:d::11/128'
     - '2620:1ec:8f0::/46'
     - '2620:1ec:900::/46'
     - '2620:1ec:a92::152/128'
     - '2620:1ec:a92::153/1<mark>28</mark>'
  DestinationPort:
     - 143
     - 587
    - 993
     - 995
  Protocol: 'tcp'
filter_main_msrange_exchange_3:
  # Exchange Online
    "urls": [
"*.protection.outlook.com"
  #
  #
  # ]
  DestinationIp cidr:
     - '40.92.0.0/15'
     - '40.107.0.0/16'
      '52.100.0.0/14'
    - '52.238.78.88/32'
    - '104.47.0.0/17'
- '2a01:111:f400::/48'
     - '2a01:111:f403::/48'
  DestinationPort: 443
filter_main_msrange_exchange_4:
  # Exchange Online
  # "urls": |
        "*.mail.protection.outlook.com",
        "*.mx.microsoft"
  #
  #
  DestinationIp|cidr:
- '40.92.0.0/15'
    - '40.107.0.0/16'
     - '52.100.0.0/14'
    - '52.238.78.88<u>/</u>32'
    - '104.47.0.0/17'
- '2a01:111:f400::/48'
     - '2a01:111:f403::/̈/48'
  DestinationPort: 25
filter_main_msrange_sharepoint_1:
# SharePoint Online and OneDrive for Business",
# "urls": [
# "*.sharepoint.com"
  #]
  DestinationIp|cidr:
    - '13.107.136.0/22'
- '40.108.128.0/17'
     - '52.104.0.0/14'
     - '104.1<mark>46.128.0/17</mark>'
     - '150.171.40.0/22'
     - '2603:1<mark>061:1</mark>300::/40'
     - '2620:1ec:8f8::/46'
      '2620:1ec:908::/46'
```

```
- '2a01:111:f402::/48'
  DestinationPort:
     - 80
     - 443
  Protocol: 'tcp'
filter_main_msrange_office_1:
   # Microsoft 365 Common and Office Online",
         "*.officeapps.live.com",
         "*.online.office.com",
  #
  #
         "office.live.com"
  # ],
  DestinationIp|cidr:
- '13.107.6.171/32'
     - '13.107.18.15/32'
     - '13.107.140.<del>6</del>/32'
     - '52.108.0.0/14'
     - '52.244.37.168/32'
     - '2603:1006:1400::/40'
     - '2<u>603:1</u>016:2400::/40'
      '2603:1026:2400::/40'
      '2603:1036:2400::/40'
      '2603:1046:1400::/40'
      '2603:1056:1400::/40'
    - 2603:1036:1400:./40

- '2603:1063:2000::/38'

- '2620:1ec:c::15/128'

- '2620:1ec:8fc::6/128'

- '2620:1ec:a92::171/128'

- '2a01:111:f100:2000::a83e:3019/128'
     - '2a01:111:f100:2002::8975:2d79/128'
     - '2a01:111:f100:2002::8975:2da8/128'
     - '2a01:111:f100:7000::6fdd:6cd5/128'
     - '2a01:111:f100:a004::bfeb:88cf/128'
  DestinationPort:
     - 80
     - 443
  Protocol: 'tcp'
filter_main_msrange_office_2:
# Microsoft 365 Common and Office Online
     "urls": [
  #
            .auth.microsoft.com",
  #
         "*.msftidentity.com",
         "*.msidentity.com",
  #
         "account.activedirectory.windowsazure.com",
  #
  #
         "accounts.accesscontrol.windows.net"
        "adminwebservice.microsoftonline.com",
"api.passwordreset.microsoftonline.com",
"autologon.microsoftazuread-sso.com",
"becws.microsoftonline.com",
"ccs.login.microsoftonline.com",
"clientconfig.microsoftonline-p.net",
"companymanagor microsoftonline.com"
  #
#
  #
  #
  #
  #
         "companymanager.microsoftonline.com", "device.login.microsoftonline.com",
  #
#
  #
         "graph.microsoft.com",
  #
         "graph.windows.net", "login-us.microsoftonline.com",
  #####
         "login.microsoft.com",
         "login.microsoftonline-p.com",
         "login.microsoftonline.com",
         "login.windows.net",
         "logincert.microsoftonline.com",
```

```
"loginex.microsoftonline.com",
___nexus.microsoftonline-p.com",
          "passwordreset.microsoftonline.com",
    #
          "provisioningapi.microsoftonline.com"
    #
    #]
    DestinationIp|cidr:
       '20.20.32.0/19'
         '20.190.128.0/18'
        '20.231.128.0/19'
       - '40.126.0.0/18'
       - '2603:1006:2000::/48'
        '2603:1007:200::/48'
        '2603:1016:1400::/48'
        '2603:1017::/48'
        '2603:1026:3000::/48'
'2603:1027:1::/48'
        '2603:1036:3000::/48'
      - '2603:1037:1::/48'
- '2603:1046:2000::/48'
- '2603:1047:1::/48'
      - '2603:1056:2000::/48'
       - '2603:1057:2::/48'
    DestinationPort:
       - 80
       - 443
    Protocol: 'tcp'
  filter_main_msrange_office_3:
# Microsoft 365 Common and Office Online
       "urls": [
          "*.compliance.microsoft.com",
         "*.protection.office.com",
         "*.security.microsoft.com"
    #
    #
          "compliance.microsoft.com",
    #
          "defender.microsoft.com",
    #
          "protection.office.com",
    #
          <u>"security.microsoft.com"</u>
    # 1
    DestinationIp cidr:
      - '13.107.6.192/32'
- '13.107.9.192/32'
- '52.108.0.0/14'
      - '2620:1ec:4::192/128'
- '2620:1ec:a92::192/128'
    DestinationPort: 443
    Protocol: 'tcp'
  condition: selection and not 1 of filter_main_*
falsepositives:
  - You may have to tune certain domains out that Excel may call out to, such as Microsoft or other business
use case dómains.
 - Office documents commonly have templates that refer to external addresses, like "sharepoint.ourcompany.
com" which may have to be tuned.

- It is highly recommended to baseline your activity and tune out common business use cases.
level: meďium
```



VAIRAV BEST PRACTICES

We strongly advise applying the following complete procedures to properly mitigate and prevent ransomware attacks:

1. Implement Regular Data Backups

Regular data backups are essential because they provide an effective way of restoring the data in the event of a ransomware attack. Backing up vital data regularly ensures that even if the files are encrypted by ransomware, one can restore them from a safe backup source. Offline or isolated network storage methods are advised to keep backups safe during an attack.

2. Develop an Incident Response Plan

It is critical to have a well-defined incident response strategy in place before reacting to a ransomware attack. The strategy should outline specific processes and responsibilities for isolating affected systems, alerting key stakeholders, and beginning the recovery process. Organizations that have an established and rehearsed response strategy can reduce downtime, limit the attack, and swiftly resume operations.

3. Restrict Execution of Files from Untrusted Sources

Ransomware frequently penetrates organizations via malicious email attachments, untrustworthy website downloads, or illegal software. Implementing strict security measures, such as application whitelisting or sandboxing solutions, to prohibit the execution of files from untrusted sources, aids in the prevention of harmful code execution. This gives an extra layer of defense and lowers the risk.

4. Keep Systems and Software Updated

Regularly upgrading operating systems, software programs, and firmware is critical because it helps to fix security weaknesses that ransomware attackers can exploit. Updates and patches are released by software manufacturers to address known vulnerabilities, therefore staying up to date is critical for ensuring a safe computer environment.

5. Implement the Least Privilege Principle

The principle of least privilege guarantees that employees are only provided the access rights and privileges required to carry out their job tasks. Organizations may lower the attack surface for ransomware by restricting access to essential systems and sensitive data. In the case of a successful ransomware outbreak, limiting user rights can reduce the damage and prevent lateral network migration.



6. Use Robust Antivirus and Anti-Malware Solutions:

Using trusted antivirus and anti-malware software adds an extra layer of protection against ransomware. These technologies aid in detecting and preventing harmful files and actions, including known ransomware incidents. Maintaining them ensures that you have the most recent virus definitions to identify and prevent new threats.

7. Implement Multi-factor Authentication (MFA)

Multi-factor authentication strengthens the security of your organization's systems and accounts. MFA helps prevent unwanted access even if a user's credentials are compromised by requiring multiple authentication factors, such as a password and a unique verification code. This greatly decreases the possibility of attackers obtaining control of important systems and data.

8. Enable Firewall and Intrusion Detection/Prevention Systems

Firewalls serve as a line of defense between the internal network and external threats. Configuring firewalls to filter incoming and outgoing network traffic aids in the prevention of intrusion and suspicious connections. It monitors network traffic for malicious activity signals and responds quickly to prevent possible ransomware attacks.

It is important to remember that the cyber adversaries behind ransomware gangs are likely to constantly evolve their methods, tools, and techniques to evade detection and continue to be successful in their attacks. Therefore, organizations and individuals must stay informed about the latest TTPs of the 8Base ransomware gang and take proactive steps to protect themselves.



CONCLUSION

The Bashe ransomware group, also known as APT73, has quickly gained notoriety since its emergence in April 2024. By leveraging double extortion tactics like those used by the LockBit group, Bashe has effectively targeted multiple critical industries across developed nations. Their operations are characterized by sophisticated phishing campaigns, exploitation of public-facing applications, and reliance on the Tor network to maintain anonymity.

Despite their rapid growth, the group's infrastructure remains in its developmental phase, with a rudimentary data leak site and limited publicized data breaches. However, their increasing attack volume and ability to compromise high-profile organizations, such as Malindo Air and ICICI Bank, indicate a significant threat to businesses worldwide.



CONTACT US



VIRAV TECH CYBER DEFENDER

Cybersecurity for ALL



vairavtech.com



sales@vairavtech.com



+977-9820105900, 9820105959



Thirbam Sadak 148, Baluwatar Kathmandu, Nepal