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IRAN CONFLICT: CYBER OPERATIONS & GLOBAL IMPLICATIONS

Thrive Cyber Threat Intelligence team.

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1. OVERALL RISK ASSESSMENT: CRITICAL

The ongoing military conflict involving Iran has directly accelerated Iranian-nexus APT activity across the Middle East and beyond. MuddyWater, OilRig (APT34), APT33 (Elfin), and affiliated proxy groups are conducting simultaneous espionage, sabotage, and disruptive operations aligned with Iranian strategic objectives.

- Key Intelligence Judgments:
- Operation Olalampo (MuddyWater) is an ACTIVE campaign targeting MENA organizations with four novel malware families, confirmed active as of 01 February 2026
- Iranian APTs have historically responded to military escalation with accelerated wiper and destructive malware deployments (ZeroCleare, StoneDrill precedent)
- Critical infrastructure sectors — energy, government, telecommunications, and defense — face elevated threat levels as Iran pursues asymmetric cyber options
- AI-assisted malware development by Iranian APTs (confirmed via Google/Group-IB reporting) signals an accelerating offensive capability uplift
- Global spillover is assessed as LIKELY: organizations in the US, UK, Europe, and allied nations should anticipate increased targeting
- Recommended Posture: HEIGHTENED VIGILANCE. Activate enhanced monitoring. Review and apply all relevant IOCs immediately.

2. GEOPOLITICAL CONTEXT & CYBER NEXUS

2.1 The Iran Conflict: Strategic Cyber Implications

The current military conflict involving Iran has fundamentally altered the cyber threat landscape across the Middle East and globally. Historically, Iranian military pressure has been directly coupled with escalated cyber operations — Iran's APT ecosystem functions as an instrument of state power, enabling asymmetric retaliation, intelligence collection, and political pressure when conventional options are constrained.

Iran maintains one of the most capable and prolific state-sponsored cyber programs globally, comprising multiple distinct threat clusters aligned to different intelligence and military services:

APT Group	Also Known As	IRGC/MOIS Affiliation	Primary Mission	Key Sectors Targeted
MuddyWater	Static Kitten, TEMP.Zagros, Seedworm	MOIS (Ministry of Intel)	Espionage, Persistent Access	Govt, Telecom, Energy, Defense
OilRig (APT34)	Helix Kitten, Chrysene	MOIS	Espionage, Data Theft	Finance, Govt, Energy, Healthcare
APT33 (Elfin)	Refined Kitten, Magnallium	IRGC	Espionage, Sabotage	Aviation, Energy, Petrochemical
Charming Kitten	APT35, Phosphorus	IRGC	Espionage, Influence Ops	Academia, Civil Society, Media
Agrius	Pink Sandstorm	IRGC (assessed)	Destructive Ops, Wiper	Israel, Regional Orgs
Indra	(Independent)	Unclear/Proxy	Disruptive Ops, Wiper	Iranian Govt, Regional Targets

2.2 Historical Escalation Pattern

Intelligence analysis of past Iranian military-cyber correlations reveals a consistent pattern: significant kinetic escalation events are followed within 2-6 weeks by increased cyber operation tempo against both direct adversaries and aligned Western nations. Notable precedents include:

- 2019 US-Iran tensions following sanctions: surge in APT33 and OilRig activity, increased spear phishing against US critical infrastructure
- 2020 Soleimani killing: immediate spike in Iranian APT reconnaissance and credential harvesting operations across US, European, and Gulf state targets
- 2021-2022 Abraham Accords normalization: Agrius (Iranian-linked) deployed destructive wiper malware against Israeli and regional organizations
- 2022 Albanian cyberattack: ZeroCleare wiper deployed against Albanian government, attributed to Iranian MOIS elements, marking first known Iranian nation-state attack on a NATO member
- 2024-2025 ongoing: Charming Kitten conducted sustained spear phishing against US presidential campaign personnel; OilRig maintained persistent access to Middle Eastern government networks

The current conflict environment is assessed to represent the highest risk threshold since 2019-2020, with multiple Iranian APT groups active simultaneously and novel tooling confirmed in the field.

3. ACTIVE THREAT ACTOR PROFILES

3.1 MuddyWater — Operation Olalampo (CONFIRMED ACTIVE)

CURRENT CAMPAIGN: OPERATION OLALAMPO

Active Period: 26 January 2026 - Present | Attribution: HIGH CONFIDENCE | Primary Targeting: MENA Region | Key Malware: GhostFetch, GhostBackDoor, HTTP_VIP, CHAR (Rust Backdoor)

MuddyWater is assessed as the most immediately relevant Iranian APT given confirmed active campaign activity through February 2026. Group-IB intelligence (published 02 March 2026) provides comprehensive detail on Operation Olalampo, a multi-vector espionage campaign targeting organizations primarily in the MENA region, timed to align with current geopolitical escalation.

3.1.1 Campaign Overview

Operation Olalampo represents a significant evolution in MuddyWater tradecraft, deploying four novel malware variants simultaneously and incorporating AI-assisted development — consistent with Google Threat Intelligence reporting on Iranian APT use of Gemini for malware code generation. The campaign demonstrates both improved capability and an accelerated operational tempo aligned with the conflict timeline.

3.1.2 Novel Malware Families Deployed

Malware	Type	Language	C2 Mechanism	Key Capability	Evasion Features
GhostFetch	Downloader	Native (C/C++)	promoverse[.]org (Cloudflare-protected)	Reflective in-memory PE loading, AES-encrypted payload	Hardware profiling: <2GB RAM, <2 CPU cores, USB count; mouse movement validation;

Malware	Type	Language	C2 Mechanism	Key Capability	Evasion Features
					debugger/VM detection
GhostBackDoor	Backdoor	Native	promoverse[.]org (AES-encrypted, French API endpoints)	Full interactive shell, file R/W, process stream management, fragmented C2 traffic to evade IDS	Adaptive installation: service (admin), RecycleBin CLSID masquerade, startup folder
HTTP_VIP	Downloader/Backdoor	Python (compiled)	codefusiontech[.]org, miniquest[.]org	AnyDesk RMM deployment, SOCKS5 proxy via FMAPP.dll, geolocation of victims, healthcare domain guardrail (honeypot avoidance)	Domain guardrail check prevents execution on known honeypot healthcare domain
CHAR	Backdoor	Rust	Telegram Bot (stager_51_bot)	CMD/PowerShell execution, directory traversal	AI-assisted code generation evidenced by emoji debug strings; bot-based C2 evades traditional network detection

3.1.3 Infection Chain

- Initial Access (T1566.001): Malicious Microsoft Office documents (Excel/Word) with macro-based execution delivered via spear phishing — themes include energy/marine sector lures and flight tickets
- Execution (T1059.001): Macro triggers on document open, decodes payload from embedded User Form Text Box elements, drops to %Public% or %LOCALAPPDATA% paths
- Sandbox Evasion (T1497): GhostFetch validates hardware profile (RAM, CPU, USB history), checks mouse movement, scans for debuggers and AV tools, uses GetTickCount64 timing checks
- Persistence (T1547.001, T1543.003): Registry 'User Shell Folders\Startup', Windows service 'MicrosoftVersionUpdater', scheduled task 'DailyUpdate'
- C2 Communication (T1071.001, T1095): AES-encrypted HTTP with French API endpoints; Telegram Bot API for CHAR; fragmented command structure to evade network detection
- Post-Exploitation: Credential theft (cobe-notes.txt upload to 143[.]198[.]5[.]41), domain enumeration, FMAPP.dll SOCKS5 proxy deployment, AnyDesk RMM for persistent remote access

3.1.4 Attribution Indicators

- Persian keyboard artifact: 'فئعط' (mis-typed 'tmux' in Persian keyboard layout) found in C2 server command history
- Developer usernames 'DontAsk' and 'Jacob' observed in malicious document metadata and malware PDB paths — consistent with BlackBeard (MuddyWater) attribution
- Infrastructure overlap: netvigil[.]org used in October 2025 MuddyWater operations shares identical HTML content with current campaign C2
- FMAPP.dll (SOCKS5 reverse proxy) matches samples from Israeli government CERT advisory ALERT_CERT_IL_W_1858
- Macro execution logic (nested loop sandbox evasion, User Form Text Box payload delivery) matches previously attributed MuddyWater samples (SHA1: 02ccc427...)
- CHAR Rust backdoor development environment paths match BlackBeard malware (Archer RAT), both compiled by user 'Jacob' on domain 'ultra'

3.2 OilRig (APT34) Persistent Regional Operator

THREAT POSTURE

Activity Level: ELEVATED (Based on geopolitical correlation) | Primary Tools: PowerExchange, ODAgent, SEASHARPEE | Active Regions: Israel, Gulf States, Government Networks

OilRig (APT34) is an MOIS affiliated threat group with sustained operational activity targeting government, energy, and financial institutions across the Middle East. During periods of Iranian geopolitical stress, OilRig historically pivots from long-dwell espionage to more aggressive data theft and pre-positioning for potential destructive operations.

- PowerExchange: PowerShell backdoor abusing Microsoft Exchange for C2 — deployed against government targets in the Middle East since 2023. Extremely difficult to detect via standard network monitoring.
- ODAgent: C#/.NET downloader used since 2022 for payload staging and file exfiltration, with confirmed operations against Israeli organizations
- SEASHARPEE: Web shell deployed on internet-facing servers for persistent access and lateral movement gateway
- RDAT: Backdoor with steganographic C2 using image-based data exchange — originally targeting telecoms since 2017

OilRig's current risk is assessed as HIGH for organizations operating in Israel, Gulf Cooperation Council states, and any entity with business relationships to entities in those regions.

3.3 APT33 (Elfin) Strategic Infrastructure Threat

THREAT POSTURE

Activity Level: ELEVATED | Confirmed Tools: StoneDrill (wiper), Shamoon-family (historically) | Key Sectors: Energy, Aviation, Petrochemical, Defense | Previous Impact: Multi-million-dollar destructive attacks on Saudi energy sector

APT33 is the Iranian threat group most associated with destructive malware capability and direct attacks on critical infrastructure. With IRGC affiliation, APT33 represents the escalation arm of Iran's cyber program, deployed when political objectives cannot be met through espionage alone.

- StoneDrill: Wiper malware targeting both Middle Eastern and European organizations, associated with APT33. Incorporates anti-emulation techniques and targets MBR for maximum destruction.
- Historical correlation: APT33 escalations directly preceded and followed major Iranian Saudi political confrontations; current conflict substantially elevates risk of renewed infrastructure targeting
- Pre-positioning concern: Intelligence suggests APT33 may maintain dormant access in energy sector networks for activation during conflict scenarios — conducting apparent reconnaissance that presages destructive deployment

3.4 Agrius — Destructive Operations Specialist

Agrius, assessed with moderate confidence to have Iranian government connections, specializes in destructive operations masked as ransomware. Multilayer Wiper (Agrius) targets Israeli and regional organizations and has been observed using fabricated ransomware notes to complicate attribution while achieving destructive goals.

- Multilayer Wiper: .NET-based wiper malware with anomalous future compilation timestamps indicating metadata manipulation to hinder forensic analysis
- Primary regional targeting: Israeli organizations and those with significant Israeli business relationships
- Escalation probability: ELEVATED given current military conflict context

4. IRANIAN APT MALWARE ARSENAL — CURRENT THREAT LANDSCAPE

4.1 Destructive Capability: Wiper Malware

The following Iranian-nexus wiper families represent the highest-consequence threat vector — capable of irreversible data destruction across enterprise environments. Their deployment history demonstrates direct correlation with geopolitical escalation events:

Malware	APT Association	Target Regions	Destructive Method	Escalation Risk
ZeroCleare	MOIS (suspected)	Middle East, Albania (NATO)	RawDisk driver for direct storage overwrite; combined with legitimate Eldos RawDisk tool	CRITICAL
StoneDrill	APT33	Middle East, Europe	MBR wipe + file destruction; anti-emulation techniques	CRITICAL
Multilayer Wiper	Agrius	Israel, Regional	.NET wiper with ransomware masquerade; metadata manipulation	HIGH
Shamoon (Disttrack)	APT33 (historic)	Saudi Arabia, Gulf States	MBR/VBR overwrite; reported 35,000+ workstations destroyed in Aramco attack	HIGH

Malware	APT Association	Target Regions	Destructive Method	Escalation Risk
Meteor	Indra (proxy)	Iran (retaliatory use)	Multi-stage wiper: Noti + Stardust + Meteor; targeting Iranian rail/gov	MEDIUM

4.2 Espionage & Persistent Access Tooling

Malware	Type	APT Group	Primary Function
GhostFetch	Downloader	MuddyWater	In-memory payload staging, AES-encrypted second-stage delivery
GhostBackDoor	Backdoor	MuddyWater	Full C2: interactive shell, file ops, process streaming
HTTP_VIP	Downloader/Backdoor	MuddyWater	AnyDesk RMM delivery, SOCKS5 proxy, victim geolocation
CHAR	Rust Backdoor	MuddyWater	Telegram bot C2, PowerShell/CMD execution, AI-assisted development
PowerExchange	PowerShell Backdoor	OilRig	Exchange-based C2; government targeting
ODAgent	Downloader	OilRig	Payload staging and exfiltration in Israeli/ME networks
Flame	Espionage Toolkit	Nation-State (Iran)	Comprehensive modular surveillance platform, active since 2010
DownPaper	Backdoor	Charming Kitten	Second-stage malware delivery; credential collection focus

5. GLOBAL CYBER IMPLICATIONS

5.1 Spillover Risk: Western and Allied Nations

The conflict context substantially elevates global cyber risk beyond the immediate MENA theater. Historical precedent and current intelligence indicate that Iranian APT operations during escalation phases routinely target Western governments, defense contractors, technology companies, and organizations with regional business exposure. Key global risk vectors include:

Threat Vector	Risk Level	Primary Targets	Assessment Basis
Direct Iranian APT Targeting (US/UK/EU)	CRITICAL	Defense contractors, Govt agencies, Energy sector	Confirmed pattern from 2019-2020 escalation: CISA advisories on Iranian targeting of US critical infrastructure
Ransomware-as-a-Cover Operations	HIGH	Any enterprise, Critical infrastructure	Iranian actors use ransomware facades to mask espionage/wiper deployments (Agrius precedent)
Supply Chain & Technology Sector	HIGH	Software vendors, Cloud providers, IT MSPs	MuddyWater targeting of system integrators in Operation Olalampo
Financial Sector & Cryptocurrency	HIGH	Banks, Fintech, Exchanges	Iran uses cryptocurrency to evade sanctions; associated threat actors target financial institutions
NATO Member States (Escalation scenario)	HIGH	All sectors in NATO countries	ZeroCleare against Albania (NATO member) established precedent for direct NATO nation targeting
Proxy & Hacktivist Groups	MEDIUM-HIGH	Media, NGOs, Political orgs	Iran deploys proxy hacktivist fronts to amplify disruption while maintaining deniability

5.2 Critical Infrastructure Sector Risk Matrix

Sector	Threat Level	Likelihood (30-day)	Primary Attack Vector	Historical Precedent
Energy & Oil/Gas	CRITICAL	HIGH	Spear phishing, VPN exploitation, insider threat	Shamoon Aramco attack; APT33 sustained energy targeting

Sector	Threat Level	Likelihood (30-day)	Primary Attack Vector	Historical Precedent
Government & Defense	CRITICAL	HIGH	Spear phishing, web-facing server exploitation	Continuous OilRig/MuddyWater government targeting; Albanian attack
Telecommunications	HIGH	HIGH	Supply chain compromise, router/edge device exploitation	OilRig RDAT targeting telcos; MuddyWater telecom history
Healthcare	HIGH	MEDIUM-HIGH	Ransomware delivery, medical device targeting	HTTP_VIP healthcare domain guardrail (suggests healthcare awareness); regional hospital attacks
Financial Services	HIGH	MEDIUM	Credential theft, SWIFT system targeting	APT33 financial targeting; sanctions evasion via crypto
Aviation & Aerospace	HIGH	MEDIUM	Espionage, intellectual property theft	APT33 confirmed aviation sector targeting
Technology/IT Providers	MEDIUM-HIGH	MEDIUM	Supply chain, credential stuffing, RMM abuse	MuddyWater AnyDesk RMM abuse; system integrator targeting

5.3 AI-Enabled Capability Acceleration

A significant intelligence development in the current campaign cycle is confirmed AI-assisted malware development by Iranian APT actors. Group-IB analysis of CHAR backdoor samples identified emoji debug strings — an artifact of AI-generated code not sanitized before compilation — consistent with Google Threat Intelligence reporting that MuddyWater is actively using Gemini for malware development.

This represents a strategic inflection point with the following implications:

- Development cycle compression: AI assistance can significantly accelerate iteration from concept to deployable malware, reducing the time advantage defenders have when new TTPs are detected and signatures developed

- Quality uplift: AI-assisted code is likely to have fewer bugs and may produce more sophisticated evasion techniques than purely manual development
- Detection gap widening: Rapidly evolving malware families will increasingly outpace signature-based defenses; behavioral detection becomes paramount
- Proxy group capability uplift: Lower-skilled proxy/hacktivist groups can leverage AI to punch above their weight class in technical sophistication

6. INDICATORS OF COMPROMISE (IOCs)

6.1 Network Indicators — Operation Olalampo (MuddyWater)

Type	Indicator	Malware Family	C2 Role	Status
Domain	promoverse[.]org	GhostFetch / GhostBackDoor	Primary C2 (Cloudflare-protected)	Active Jan-Feb 2026
Domain	codefusiontech[.]org	HTTP_VIP	Primary C2 (Cloudflare-protected)	Active Feb 2026
Domain	miniquest[.]org	HTTP_VIP	Secondary C2 (Cloudflare-protected)	Active Feb 2026
Domain	netvigil[.]org	GhostFetch / GhostBackDoor	Prior campaign C2 (infrastructure reuse)	Active Oct 2025
Domain	jerusalemsolutions[.]com	MuddyWater	Supporting infrastructure	Confirmed
IP	209[.]74[.]87[.]67	GhostFetch / GhostBackDoor	Real IP behind Cloudflare (promoverse[.]org)	Active Jan 2026
IP	209[.]74[.]87[.]100	HTTP_VIP	Real IP (codefusiontech[.]org); open directory with FMAPP tools	Active Feb 2026
IP	143[.]198[.]5[.]41	MuddyWater	Credential exfil target (cobe-notes.txt upload)	Active Oct 2025

Type	Indicator	Malware Family	C2 Role	Status
IP	162[.]0[.]230[.]185	MuddyWater	Supporting infrastructure	Confirmed
Telegram Bot	stager_51_bot (Olalampo)	CHAR Rust Backdoor	Telegram C2 for CHAR	Active Jan-Feb 2026

6.2 File Hashes — Operation Olalampo

SHA1 Hash	Filename	Malware Family	Description
80cea18e19665c5a57e7b9ca0bf36aad06096e93	burn.exe	GhostFetch	GhostFetch loader; drops to %LOCALAPPDATA%\BurnUtill\
62ed16701a14ce26314f2436d9532fe606c15407	FMAPP.dll	SOCKS5 Proxy	MuddyWater SOCKS5 reverse proxy injector
324918c73b985875d5f974da3471f2a0a4874687	FMAPP.exe	SOCKS5 Loader	Legitimate EXE that sideloads FMAPP.dll
f4e0f4449dc50e33e912403082e093dd8e4bc55d	AnyDesk.exe	RMM Tool	AnyDesk; deployed as HTTP_VIP second stage
d97d21536c061e7a7151a453242d36f3ab196a14	pic.LOG	HTTP_VIP	HTTP_VIP downloader dropped to user Downloads
dc785be0c4430bfc5b507255f892bf30134a02b6	attachment.xls	Dropper	Malicious Excel; drops GhostFetch/GhostBackDoor
e79ccc3f6517c911d6c1df79c94e88896f574e64	ticket.doc	Dropper	Malicious Word; flight ticket lure, HTTP_VIP
0365daf83e37d2c6daaae6c28b4c8343288ef2f9	intercom.doc	Dropper	Malicious Word document with macro
2993b0ab9786ddc29eb9cf1ace4a28c6e34ea4fb	Performance.doc	Dropper	Malicious Word; performance review lure

SHA1 Hash	Filename	Malware Family	Description
3441306816018d08dd03a97ac306fac0200e9152	chrome_inject.exe	MuddyWater	Chrome credential injector
d3fa50a9eba93a7fbc79e7ad0c4889d762718a5f	FMAPP.dll	SOCKS5 Proxy	Alternate FMAPP.dll sample

6.3 Behavioral Indicators & Detection Signatures

Category	Indicator	Relevant Technique
Process Creation	burn.exe spawning explorer.exe with shell:RecycleBinFolder argument	T1564 - Hide Artifacts
Registry	HKCU\Software\Microsoft\Windows\CurrentVersion\Explorer\User Shell Folders\Startup modification	T1547.001 - Boot AutoStart
Service Creation	Service named 'MicrosoftVersionUpdater' created by non-system process	T1543.003 - Windows Service
Scheduled Task	Task 'DailyUpdate' created pointing to Public\Downloads\novaservice.exe	T1053.005 - Scheduled Task
Network	Outbound connections to Telegram Bot API (api.telegram.org) from non-browser processes	T1095 - Non-Application Layer Protocol
Network	HTTP requests with French-language API paths: /api/accueil/, /api/graphique/, /api/utilisateurs/	T1071.001 - Web Protocols
Network	POST requests to /postinfo, /content, /upload-results, /ercv endpoints	T1071.001 - Web Protocols
File System	Executable created at %LOCALAPPDATA%\microsoft\windows\burnutill\burn.exe	T1036 - Masquerading

Category	Indicator	Relevant Technique
File System	pic.LOG or MicrosoftWordUser.exe dropped to %USERPROFILE%\Downloads or %PUBLIC%\Documents	T1036 - Masquerading
Memory	AES-decrypted PE file loaded reflectively without touching disk	T1055 - Process Injection

7. MITRE ATT&CK MAPPING

7.1 Operation Olalampo TTP Matrix

ATT&CK Technique	ID	Procedure	Detection Priority
Spearphishing Attachment	T1566.001	Malicious Excel/Word with macro-based execution; energy/marine lures	HIGH
Exploit Public-Facing Application	T1190	MuddyWater exploiting recently patched vulnerabilities on public servers	HIGH
User Execution: Malicious File	T1204.002	User opens Office document and enables macros	MEDIUM
Command and Scripting: PowerShell	T1059.001	PowerShell for post-exploitation: FMAPP.exe execution, credential upload, tool download	HIGH
Boot or Logon AutoStart: Registry Run Keys	T1547.001	User Shell Folders\Startup registry persistence	HIGH
Create or Modify System Process: Windows Service	T1543.003	MicrosoftVersionUpdater service for GhostBackDoor persistence	HIGH
Masquerading	T1036	Malware named to resemble legitimate tools (MicrosoftExcelUser.exe, novaservice.exe)	MEDIUM

ATT&CK Technique	ID	Procedure	Detection Priority
Impair Defenses: Disable or Modify Tools	T1562	Detection of analysis tools and AV; termination if sandbox environment detected	MEDIUM
Virtualization/Sandbox Evasion	T1497	Hardware profiling, mouse movement validation, timing-based evasion (GetTickCount64)	HIGH
OS Credential Dumping	T1003	Browser credential stealer; cobe-notes.txt exfiltration	HIGH
Process Discovery	T1057	whoami, tasklist, net user, ipconfig commands via Telegram bot	MEDIUM
System Network Configuration Discovery	T1016	ipconfig /all, nslookup, domain enumeration observed in Telegram bot logs	MEDIUM
Remote Services: SMB/RDP/AnyDesk	T1021	AnyDesk RMM deployed as secondary access mechanism via HTTP_VIP	HIGH
Application Layer Protocol: Web Protocols	T1071.001	HTTP/HTTPS C2 with French API endpoints; Werkzeug Python backend	HIGH
Non-Application Layer Protocol	T1095	Telegram Bot API for CHAR C2; FMAPP.dll SOCKS5 reverse proxy	HIGH
Remote Access Software	T1219	AnyDesk deployed for persistent remote control	HIGH
Exfiltration Over C2 Channel	T1041	Credentials and data uploaded to attacker C2 (143[.]198[.]5[.]41:443/success)	HIGH
Data Encrypted for Impact	T1486	Escalation risk: Iranian APT history of pivoting from espionage to destructive deployment	CRITICAL

8. DETECTION & MITIGATION RECOMMENDATIONS

8.1 Immediate Actions (0-72 Hours)

PRIORITY ACTION

These actions should be initiated within 72 hours given confirmed active Iranian APT campaigns and elevated geopolitical threat environment.

- Block all IOCs from Section 6 at perimeter firewall, proxy, and DNS: promoverse[.]org, codefusiontech[.]org, miniquest[.]org, 209[.]74[.]87[.]67, 209[.]74[.]87[.]100, 143[.]198[.]5[.]41, 162[.]0[.]230[.]185
- Hunt for Telegram Bot API (api.telegram.org) connections from non-browser processes — CHAR backdoor communicates exclusively via this channel
- Search SIEM for registry modification events to HKCU\...\User Shell Folders\Startup by non-standard processes
- Audit AnyDesk and other RMM tool installations deployed via automated processes (not user-initiated) HTTP_VIP delivers AnyDesk without user interaction
- Review and restrict macro execution policies — require digitally signed macros only via Group Policy
- Scan endpoints for file presence: burn.exe in %LOCALAPPDATA%\microsoft\windows\burnutill\, novaservice.exe in %PUBLIC%\Downloads, FMAPP.exe/FMAPP.dll in %ProgramData%

8.2 Short-Term Actions (1-2 Weeks)

- Deploy or tune EDR rules for reflective code loading and in-memory PE execution GhostFetch's in-memory payload loading is the primary detection opportunity before second-stage deployment
- Configure sandbox analysis environments with >2GB RAM, >2 CPU cores, and simulate USB device history to prevent GhostFetch from self-terminating on analysis infrastructure
- Implement network behavioral analytics to detect SOCKS5 reverse proxy tunneling (FMAPP.dll pattern: irregular outbound traffic on ports 80/443 from non-browser processes)
- Enforce least-privilege access to prevent service installation by standard users — GhostBackDoor installs as a service under administrative accounts
- Conduct targeted threat hunting for HTTP requests with French API path patterns: /api/accueil/, /api/graphique/, /api/utilisateurs/, /api/authentification/
- Review and patch Ivanti EPMM installations immediately — CVE-2026-1281 and CVE-2026-1340 are being actively exploited against healthcare, government, and technology sector targets globally with 4,400+ vulnerable instances identified

8.3 Strategic Mitigations

- Develop and exercise an Iran-specific incident response playbook covering the wiper malware scenarios (ZeroCleare, StoneDrill, Multilayer Wiper) — ensure offline backups are maintained and tested
- Establish geopolitical threat triggers: define operational thresholds at which Iranian APT posture monitoring escalates to active threat hunting
- Engage threat intelligence sharing communities (ISACs, CISA advisories) specifically for Iranian APT IOC and TTP updates given current escalation cycle
- Evaluate and monitor use of AI-assisted development tools by security teams understand that adversaries now use similar AI capabilities, reducing novelty window for newly deployed TTPs
- For organizations with Middle East operations or regional partners: conduct supply chain security review and verify partner security posture given MuddyWater targeting of regional system integrators

9. RISK ASSESSMENT

Threat Scenario	Likelihood	Impact	Overall Risk	Key Driver
MuddyWater espionage operations against MENA/global targets	VERY HIGH	HIGH	CRITICAL	Confirmed active Operation Olalampo; AI-assisted tooling; sustained campaign
OilRig persistent access / credential theft against govt/energy	HIGH	HIGH	CRITICAL	Geopolitical escalation historically increases OilRig operational tempo
Wiper/destructive malware deployment (APT33/Agrius)	MEDIUM-HIGH	CRITICAL	CRITICAL	Historical precedent: current conflict exceeds prior escalation thresholds
Iranian APT targeting of Western allies / NATO members	HIGH	HIGH	CRITICAL	Albania ZeroCleare precedent; US/UK in Iranian adversary list

Threat Scenario	Likelihood	Impact	Overall Risk	Key Driver
Ransomware-masked destructive operations	MEDIUM	CRITICAL	HIGH	Agrius ransomware masquerade TTPs; cover for state-directed destruction
Proxy hacktivist amplification campaigns	HIGH	MEDIUM	HIGH	Low barrier, high frequency; DDoS, defacement, disinformation
Critical infrastructure pre-positioning for future activation	MEDIUM	CRITICAL	HIGH	Long-dwell APT tradecraft; assumed dormant access in energy/water
AI-accelerated zero-day development / novel malware	MEDIUM	HIGH	HIGH	Confirmed AI use; accelerated capability development cycle

10. INTELLIGENCE GAPS

- Full victim scope of Operation Olalampo: HTTP_VIP C2 server maintained SQLite database of compromised hosts; full victim list not publicly disclosed — unknown breadth of current MuddyWater penetration
- CHAR Rust backdoor full capability set: Telegram bot C2 limits visibility into full command set; additional capabilities may exist beyond CMD/PowerShell execution
- Current OilRig operational status: While geopolitical context predicts elevated activity, specific current campaigns post-conflict escalation not confirmed in available intelligence
- APT33 pre-positioning assessment: Whether APT33 maintains dormant access in current target networks for wiper activation is unknown without targeted threat hunting
- Proxy group tasking: Extent of Iranian direction to proxy hacktivist groups in current campaign cycle not fully characterized
- AI tooling scope: Beyond confirmed Gemini use by MuddyWater, full scope of AI tooling adoption across Iranian APT ecosystem not characterized
- gshdoc_release_X64_GUI.exe identity: Unidentified binary deployed by MuddyWater during Telegram bot post-exploitation activity; capabilities and attribution to known toolset unconfirmed

11. ANALYST COMMENT

ASSESSMENT CONFIDENCE: MEDIUM-HIGH

This report is based on live intelligence from Thrive intelligence platform data, Group-IB published threat research (Operation Olalampo, 02 March 2026), MITRE ATT&CK attribution data, and historical precedent analysis. Key intelligence sources (Group-IB) are assessed as highly reliable with HIGH confidence attribution to MuddyWater. Geopolitical assessments and escalation predictions are based on historical correlation analysis and carry inherent uncertainty given the dynamic nature of the current conflict environment.

The convergence of three significant intelligence signals warrants analyst attention: (1) confirmed AI-assisted malware development by MuddyWater, (2) the deployment of four novel malware families simultaneously suggesting well-resourced, intentional capability development rather than ad hoc operations, and (3) the healthcare domain guardrail embedded in HTTP_VIP demonstrating sophisticated operational security and awareness of defensive monitoring infrastructure.

The Telegram bot command history obtained by Group-IB provides an unprecedented window into Iranian APT operational tradecraft — including test-before-deploy practices, Persian keyboard artifacts, and developer username exposure. This level of operational security failure is notable and may indicate operational pressure driving accelerated deployment at the expense of OPSEC.

Analyst Assessment: Iranian APT groups are operating in an elevated tempo aligned with the current geopolitical conflict. The historical pattern of cyber-kinetic coupling is reasserting itself. Organizations should not wait for direct targeting evidence before elevating their defensive posture.

12. ESCALATION CRITERIA

IMMEDIATE ESCALATION TRIGGERS

Any of the following indicators should trigger immediate escalation to Tier 2 and engagement of the incident response team:

- Detection of any IOC from Section 6 in network logs, endpoint telemetry, or DNS queries
- Any Office document with macro enabling prompt using energy/marine, flight, or HR performance review lures received by any staff member
- AnyDesk or other RMM tool installed on endpoint without IT-sanctioned deployment record
- Service named 'MicrosoftVersionUpdater' or scheduled task 'DailyUpdate' detected
- Outbound Telegram API connections (api.telegram.org) from non-browser Windows processes
- HTTP requests with French API endpoint path patterns matching GhostBackDoor C2 protocol

- Detection of wiper-class malware behavior: MBR write operations, mass file deletion, VSS deletion (vssadmin delete shadows), or RawDisk driver loading
- Any indication of lateral movement from a system identified as running FMAPP.exe or FMAPP.dll