

HiveForce Labs

# THREAT ADVISORY

**ACTOR REPORT**

## **Unraveling North Korea's Cyber Espionage Group APT43 Targeting Geopolitical Interests**

Date of Publication

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Admiralty code

A1

TA Number

TA2023169

# Summary

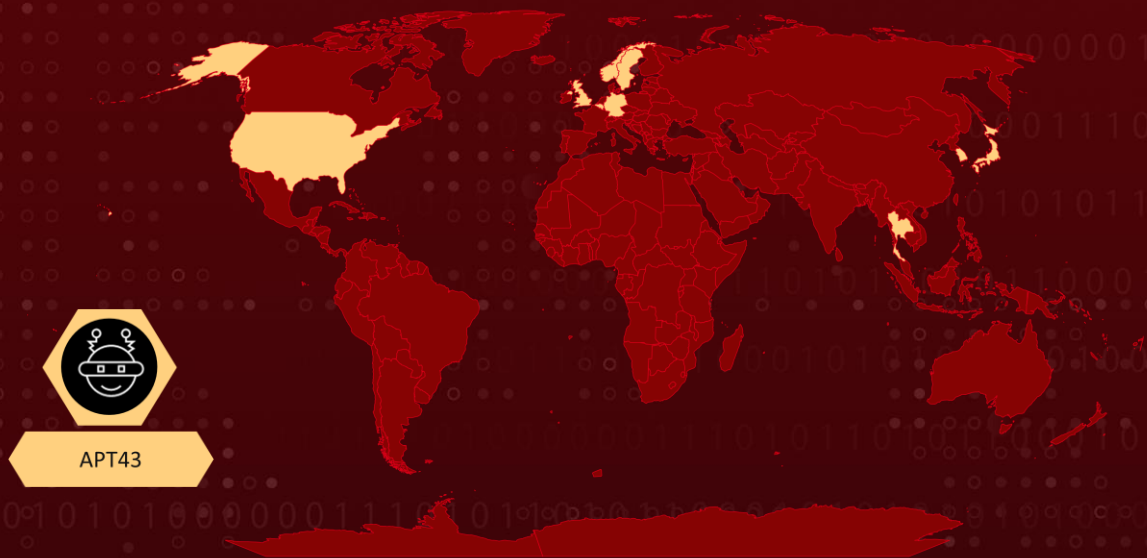
**First Appearance:** June 2018

**Actor Name:** APT43

**Target Countries:** United States, Germany, Belgium, United Kingdom, Sweden, Norway, Thailand, South Korea, Japan

**Target Sectors:** NGOs, Education, Governments, Media and entertainment, Construction, Materials, Defense, Aerospace, Telecoms, High-tech , Pharmaceuticals, Consulting and Professional services

## Actor Map



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# Actor Details

## #1

APT43 is a cyber espionage group that serves North Korean regime interests by targeting government organizations, academics, and think tanks focused on Korean peninsula geopolitical issues, mainly in South Korea and the US. The group uses social engineering tactics and moderately advanced technical capabilities, funding its primary mission of collecting strategic intelligence through cybercrime operations. To purchase operational tooling and infrastructure, the group creates numerous fake personas and cover identities.

## #2

The group collects strategic intelligence that aligns with North Korea's geopolitical interests and engages in financially motivated cybercrime. APT43's intelligence collection priorities align with North Korea's foreign intelligence service, the Reconnaissance General Bureau, and focus on foreign policy and nuclear security issues that support North Korea's strategic and nuclear ambitions. In 2021, the group also targeted health-related verticals to support pandemic response efforts.

## #3

APT43 is highly active in phishing and credential collection campaigns and coordinates with other North Korean cyber espionage groups. The group targets regions including South Korea, the US, Japan, and Europe, with campaigns aimed at enabling North Korea's weapons program. The group's activities strongly correlate with geopolitical developments that affect North Korean leader Kim Jong-un and the ruling elite and closely align with state interests.

## Actor Group

NAME	ORIGIN	TARGET COUNTRIES	TARGET INDUSTRIES
APT43	North Korea	United States, Germany, Belgium, United Kingdom, Sweden, Norway, Thailand, South Korea, Japan	NGOs, Education, Governments, Media and entertainment, Construction, Materials, Defense, Aerospace, Telecoms, High-tech, Pharmaceuticals, Consulting and Professional services
	<b>MOTIVE</b>		
	Information theft & Espionage; State-sponsored		

# Recommendations



## Security Leaders

Phishing simulations and routine education and awareness training and communications rarely account for MFA fatigue and web browser hygiene. Integrate and communicate all lessons learned.



## Security Engineers

- **Uni5 Users:** This is an actionable threat advisory in HivePro Uni5. Prioritize and block all indicators attributed to the threat actor through your Command Center. Test your controls with Uni5's Breach & Attack Simulation.
- **All Engineers:** Refer to and action upon the 'Potential MITRE ATT&CK TTPs' & 'Indicators of Compromise (IoC)' on the following pages.

## Potential MITRE ATT&CK TTPs

<b>TA0042</b> Resource Development	<b>TA0001</b> Initial Access	<b>TA0002</b> Execution	<b>TA0003</b> Persistence
<b>TA0005</b> Defense Evasion	<b>TA0006</b> Credential Access	<b>TA0007</b> Discovery	<b>TA0009</b> Collection
<b>TA0011</b> Command and Control	<b>TA0010</b> Exfiltration	<b>TA0040</b> Impact	<b>T1566</b> Phishing
<b>T1566.001</b> Spearphishing Attachment	<b>T1566.002</b> Spearphishing Link	<b>T1583</b> Acquire Infrastructure	<b>T1583.003</b> Virtual Private Server
<b>T1584</b> Compromise Infrastructure	<b>T1588</b> Obtain Capabilities	<b>T1588.003</b> Code Signing Certificates	<b>T1588.004</b> Digital Certificates
<b>T1608</b> Stage Capabilities	<b>T1608.003</b> Install Digital Certificate	<b>T1608.005</b> Link Target	<b>T1047</b> Windows Management Instrumentation

<b><u>T1053</u></b> Scheduled Task/Job	<b><u>T1053.005</u></b> Scheduled Task	<b><u>T1059</u></b> Command and Scripting Interpreter	<b><u>T1059.001</u></b> PowerShell
<b><u>T1059.003</u></b> Windows Command Shell	<b><u>T1059.005</u></b> Visual Basic	<b><u>T1059.007</u></b> JavaScript	<b><u>T1129</u></b> Shared Modules
<b><u>T1203</u></b> Exploitation for Client Execution	<b><u>T1204</u></b> User Execution	<b><u>T1204.001</u></b> Malicious Link	<b><u>T1204.002</u></b> Malicious File
<b><u>T1569</u></b> System Services	<b><u>T1569.002</u></b> Service Execution	<b><u>T1071</u></b> Application Layer Protocol	<b><u>T1071.001</u></b> Web Protocols
<b><u>T1071.004</u></b> DNS	<b><u>T1090</u></b> Proxy	<b><u>T1090.003</u></b> Multi-hop Proxy	<b><u>T1095</u></b> Non-Application Layer Protocol
<b><u>T1102</u></b> Web Service	<b><u>T1102.002</u></b> Bidirectional Communication	<b><u>T1105</u></b> Ingress Tool Transfer	<b><u>T1132</u></b> Data Encoding
<b><u>T1132.001</u></b> Standard Encoding	<b><u>T1573</u></b> Encrypted Channel	<b><u>T1573.002</u></b> Asymmetric Cryptography	<b><u>T1007</u></b> System Service Discovery
<b><u>T1010</u></b> Application Window Discovery	<b><u>T1012</u></b> Query Registry	<b><u>T1016</u></b> System Network Configuration Discovery	<b><u>T1033</u></b> System Owner/User Discovery
<b><u>T1057</u></b> Process Discovery	<b><u>T1082</u></b> System Information Discovery	<b><u>T1083</u></b> File and Directory Discovery	<b><u>T1087</u></b> Account Discovery
<b><u>T1518</u></b> Software Discovery	<b><u>T1614</u></b> System Location Discovery	<b><u>T1614.001</u></b> System Language Discovery	<b><u>T1056</u></b> Input Capture
<b><u>T1056.001</u></b> Keylogging	<b><u>T1113</u></b> Screen Capture	<b><u>T1115</u></b> Clipboard Data	<b><u>T1213</u></b> Data from Information Repositories
<b><u>T1560</u></b> Archive Collected Data	<b><u>T1560.001</u></b> Archive via Utility	<b><u>T1137</u></b> Office Application Startup	<b><u>T1505</u></b> Server Software Component
<b><u>T1505.003</u></b> Web Shell	<b><u>T1543</u></b> Create or Modify System Process	<b><u>T1543.003</u></b> Windows Service	<b><u>T1547</u></b> Boot or Logon Autostart Execution
<b><u>T1547.001</u></b> Registry Run Keys / Startup Folder	<b><u>T1547.004</u></b> Winlogon Helper DLL	<b><u>T1547.009</u></b> Shortcut Modification	<b><u>T1027</u></b> Obfuscated Files or Information

<b><u>T1027.001</u></b> Binary Padding	<b><u>T1027.002</u></b> Software Packing	<b><u>T1027.005</u></b> Indicator Removal from Tools	<b><u>T1027.009</u></b> Embedded Payloads
<b><u>T1036</u></b> Masquerading	<b><u>T1036.001</u></b> Invalid Code Signature	<b><u>T1036.007</u></b> Double File Extension	<b><u>T1055</u></b> Process Injection
<b><u>T1055.001</u></b> Dynamic-link Library Injection	<b><u>T1055.003</u></b> Thread Execution Hijacking	<b><u>T1070</u></b> Indicator Removal	<b><u>T1070.004</u></b> File Deletion
<b><u>T1070.006</u></b> Timestomp	<b><u>T1112</u></b> Modify Registry	<b><u>T1134</u></b> Access Token Manipulation	<b><u>T1140</u></b> Deobfuscate/Decode Files or Information
<b><u>T1218</u></b> System Binary Proxy Execution	<b><u>T1218.005</u></b> Mshta	<b><u>T1497</u></b> Virtualization/Sandbox Evasion	<b><u>T1497.001</u></b> System Checks
<b><u>T1548</u></b> Abuse Elevation Control Mechanism	<b><u>T1548.002</u></b> Bypass User Account Control	<b><u>T1553</u></b> Subvert Trust Controls	<b><u>T1553.002</u></b> Code Signing
<b><u>T1564</u></b> Hide Artifacts	<b><u>T1564.003</u></b> Hidden Window	<b><u>T1564.007</u></b> VBA Stomping	<b><u>T1620</u></b> Reflective Code Loading
<b><u>T1622</u></b> Debugger Evasion	<b><u>T1489</u></b> Service Stop	<b><u>T1529</u></b> System Shutdown/Reboot	<b><u>T1020</u></b> Automated Exfiltration
<b><u>T1110</u></b> Brute Force	<b><u>T1555</u></b> Credentials from Password Stores	<b><u>T1555.003</u></b> Credentials from Web Browsers	

## ✂ Indicator of Compromise (IOCs)

TYPE	VALUE
<b>MD5</b>	982fc9ded34c85469269each1cb4ef26 de9a8c26049699dbbd5d334a8566d38d 144bd7fd423edc3965cb0161a8b82ab2 cd83a51bec0396f4a0fd563ca9c929d7 33df74cbb60920d63fe677c6f90b63f9 ebaf83302dc78d96d5993830430bd169 b846fa8bc3a55fa0490a807186a8ece9 f92a75b98249fa61cf62e8b63cb68fae 1dcd5afecffe2040895686eefa0a9629 5fe4da6a1d82561a19711e564adc7589

TYPE	VALUE
<p><b>MD5</b></p>	<p>e8da7fcdf0ca67b76f9a7967e240d223  2bf26702c6ecbd46f68138cdcd45c034  2d330c354c14b39368876392d56fb18c  15ec5c7125e6c74f740d6fc3376c130d  2a5562de1d3e734d9328a1c78b43c2e5  0cc0aa5877cec9109b7a5a0e3a250c72  2c530adb841114366ce6177ce964a5e6  c066b81c4b8b0703f81f8bc6fb432992  1d30dfa5d8f21d1465409b207115ded6  21cffaa7f9bf224ce75e264bfb16dd0d  20bc53deb7b1214580e9d9efeea5e9d7  9cdda333432f403b408b9fe717163861  ddae18c65d583b41a2157d496a4bde61  1ffccf6cb3b74d68df2b899fd33127a5  60efecf4e1b5b2c580329e9afa05db15  0f77143ce98d0b9f69c802789e3b1713  0b558ee89a7bb32968ef78104f6b9a28  139d2561f5c72fab099a12c16b8960c  14a00f517012279af53118a491253e5c  37e7d679cd4aa788ec63f27cb02962ea  b077ba5af1dfbd4ac523923eab56bcd4  04d0856afb1aa9168377d6aa579c5403  4626ed60dfc8deaf75477bc06bd39be7  18df13900f118158c33df904c662e875  107f917a5ddb4d3947233fbc9d47ddc8  768c84100d6e3181a26fa50261129287  946f787c129bf469298aa881fb0843f4  c9d70bf370172609da848fa785989939  0085bc8ce16ef17643909c4799ead02b  68ce092f1a3d19852ea32db8388de5c7  7e609404cc258bbe283bea6ddd7af293  0821884168a644f3c27176a52763acc9  8ca84c206fe8436dcc92bf6c1f7cf168</p>
<p><b>SHA1</b></p>	<p>636f2c20183b45691b742949d49b3d6c218c9cce  1f6c7c9219f6b6ea30cd481968ae1a038789be67  6618e25dd49b68f7b2b266eb2d787e6f05c964bc  700acc4e48eae84f80f4dbaf74bf60b79efd49bd  25d94c9ab7635ff330dabe96780f330f7f2ba775  851ba2182b37bc7380420a986840e16f73947413  d3b233d6d8b11235929e4a0cbdb12eefdd47d927  e5b312155289cdc6a80a041821fc82d2cca80bcd  40826e2064b59b8b7b3e514b9ef2c1479ac3b038</p>

TYPE	VALUE
SHA1	<p>6f4b6938ac8fd9591fc399219dbaf4347d8b444b  75c516dde8415494c288e349d440ce778dede8e3  11f646095495d625e7d71038578cc838a6d5e111  a9ff1ebb548f5bba600d38e709ff331749fa9971  f3b774e921eaad9335b9c057dd49b918c5dae4a6  4e93797dd3b383050cf0ee585aa5b5525efb2380  7d66c1f36b4b48d990461ec44d626793ade6a8d1  98040f42103ce3b840dd54bf3490587f141a0bc3  2dd269608dd7f4da171d1a220fe97347162008c7  b7fdb5e5b31adfc5ada0de1e05b0c069968e5bce  7da4e8b743478370fa41fe39a45e3ff2ca2194b3  12c508ace6e8aa42be02750d759e720b800bf796  a61f009e73ae81a18751e9aee39f8121a3902280  63e113f0a906af82903dbfac3e78bdd2d146e738  d80be054a569df5f201191dcc4fea0dde9622da5  e74b816f1c6d6347cb40121e0b50dadd0d8f1f97  862abce03f7f5de0c466fdbd24ad796578eaa110  942fd7b4ef1ccf7032a40acad975c7b5905c3c77  2508f5ff0c28356c0c3f8e6cae7b750d53495bca  5b69e3e5f4f49cf8b635a57a8c92e17a4f130d50  1d49d462a11a00d8ac9608e49f055961bf79980d  4b0d0ebb0c676efe855bed796221dd475a39ba40  47a32bc992e5d4613b3658b025ab913b0679232c  e205ed81ccb99641dcc6c2799d32ef0584fa2175  1087efbd004f65d226bf20a52f1dc0b3e756ff9e  f3b047e6eb3964deb047767fad52851c5601483f  539acd9145befd7e670fe826c248766f46f0d041  bc6cb78e20cb20285149d55563f6fdcf4aaafa58  c0c6b99796d732fa53402ff49fd241612a340229  e79527f7307c1dda62c42487163616b3e58d5028  1b9a4c0a5615a4f96a041d771646c1a407b17577  b0c2312852d750c4bceb552def6985b8b800d3f3  a1f72c890d0b920f4f4cb2d59df6fa40734de90d  fb09b89803da071b7b7eb23244771c54d979a873</p>
SHA256	<p>25c2f4703cbaa1ff4dbcfcc16a10b29ef35ccc174b71b21de360d898  540889f8  502136707a70b768800640224e48c634057dc651892113b62522f0  dd2fcf1e87  e7fae41c0bd8d3d95253bd75dce99015599ecc404bd8d737ce305f  c3e4dd018  7943bf9cc7b2adf50f7f92dd37347381e6d0aef23b34a3cd0a3afcda  1d72e16d  2d41b04f5d86047dc2353a10595418b0d5239c22112f36eb9d253b  2e8b6eb0d0  98d4471fe549bb3067ac2f2d9afd50ed1baaddab41ec4270834989e  7f1ade14d</p>



TYPE	VALUE
SHA256	<p>43c2d5122af50363c29879501776d907eaa568fa142d935f6c80e823d18223f5</p> <p>557ff6c87c81a2d2348bd8d667ea8412a1a0a055f5e1ae91701c2954ca8a3fdb</p> <p>2b78d5228737a38fa940e9ab19601747c68ed28e488696694648e3d70e53eb5a</p> <p>fb7fb6dbaf568b568cd5e60ab537a42d5982949a5e577db53cc707012c7f20e3</p> <p>94aa827a514d7aa70c404ec326edaaad4b2b738ffaea5a66c0c9f246738df579</p> <p>5cbc07895d099ce39a3142025c557b7fac41d79914535ab7ffc2094809f12a4b</p> <p>855656bfecc359a1816437223c4a133359e73ecf45acda667610fbe7875ab3c8</p> <p>d0971d098b0f8cf2187feeed3ce049930f19ec3379b141ec6a2f2871b1e90ff7</p> <p>07aed9fa864556753de0a664d22854167a3d898820bc92be46b1977c68b12b34</p> <p>8d0bafca8a8e8f3e4544f1822bc4bb08ceaa3c7192c9a92006b1eb500771ab53</p> <p>9dac6553b89645ac8d9e0a3dc877d12641e6d05fb52e8de6ae5533b2bdf0abc9</p> <p>38d1d8c3c4ec5ea17c3719af285247cb1d8879c7cf967e1be1197e60d42c01c5</p> <p>f86d05c1d7853c06fc5561f8df19b53506b724a83bb29c69b39f004a0f7f82d8</p> <p>4a1c43258fe0e3b75afc4e020b904910c94d9ba08fc1e3f3a99d188b56675211</p> <p>203ea478fa4d2d5ef513cad8b51617e0c9f7571bf3a3becf9c267a0d590c6d72</p> <p>1324acd1f720055e7941b39949116dfe72ce2e7792e70128f69e228eb48b0821</p> <p>873b8fb97b4b0c6d7992f6af15653295788526def41f337c651dc64e8e4aeebd</p> <p>63b4bd01f80d43576c279adf69a5582129e81cc4adbd03675909581643765ea8</p> <p>ed0161f2a3337af5e27a84bea85fb4abe35654f5de22bcb8a503d537952b1e8a</p> <p>a605570555620cea6d6be211520525fc95a30961661780da4cc4baf e9864f394</p> <p>908777e58161615657663656861c212ac25696741ef69411021474158fa2b4cf</p> <p>d2f4bf0caed5a442198fcdc43c83c7b27ae04f341a72b270c9ed40778aa77afe</p> <p>a4ba1e6ab678a1bdf8bc05bea8310d743928a4e2c05bad104e61afdd9cccc9a1</p>

TYPE	VALUE
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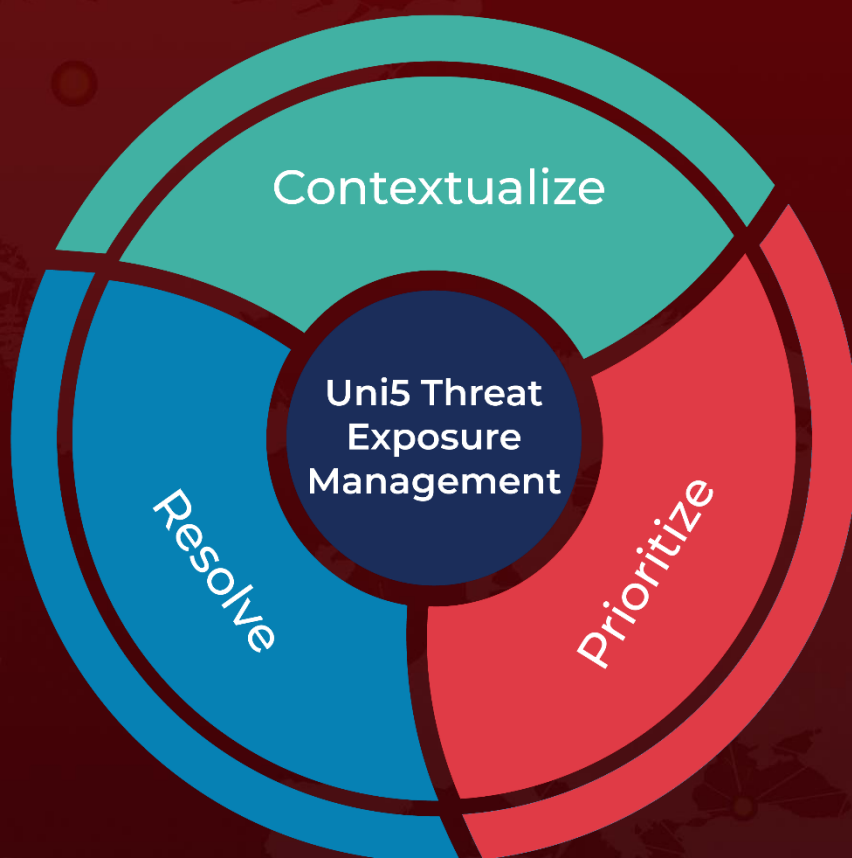
## References

<https://mandiant.widen.net/s/zvmfw5fnjs/apt43-report>

# What Next?

At Hive Pro, it is our mission to detect the most likely threats to your organization and to help you prevent them from happening.

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