PRAYAS4IAS

SPECIAL ISSUE JULY WEEK 4

Pegasus

MALWARE

Special Issue
July (Week 4)

Contents

All about the making of Pegasus

(Source: Indian Express)

Context: *Israel's NSO Group, which is at the heart of the **alleged state surveillance** of thousands of human rights activists, lawyers, journalists, politicians, and dissidents in countries including India, has built such a tool —* ***Pegasus, the world's most invasive spyware****. It can find a route into a target's device that is unknown to the developer of the device and its software, and without requiring the target to take any action such as clicking a link.*

Pegasus: The beginnings

- According to a profile of the NSO Group published by the French nonprofit Forbidden Stories, which has published the 'Pegasus Project' along with its media partners, the company was started by Shalev Hulio and Omri Lavie, friends who started out with a product placement startup MediaAnd in the early 2000s.
- The startup was all but washed out by the recession of 2008, but Hulio and Lavie found an opportunity in the 2007 launch of Apple's iPhone. It marked a watershed moment — people began to use handheld devices for more than just calling and texting at scale.
- Hulio and Lavie launched Communitake, Forbidden Stories reported, which allowed users to take control of any smartphone from a distance. This was originally meant for mobile operators, who would want to take control of devices to provide tech support. But as the use of smartphones spread and the need arose for providing security features like encrypted messaging services, this presented a challenge for law enforcement and intelligence agencies.
- So far, intelligence agencies would intercept a message or call while it was in transit on networks of telecom companies. But encrypted services meant that without the encryption key, they couldn't access the message anymore — unless they accessed the device itself and decrypted the communication.
- Without knowing it, Hulio and Lavie had solved the problem for them: agencies could simply pirate the phone itself, bypassing encryption and giving them all of the information they needed and more. The way Hulio tells it, the two Israeli entrepreneurs were approached by intelligence agencies interested in their technology.
- Hulio and Lavie knew little of the opaque world of cyber-intelligence but they decided to give it a shot. They brought on Niv Carmi, a former Mossad intelligence operative and security expert and created NSO Group in 2010. The trio (Niv, Shalev and Omrie, or NSO, for short) operated with clear roles: Niv Carmi handled the tech and Hulio and Lavie the business.

Spy-tech and zero-click

- From here on, NSO started focusing on building Pegasus as a spying solution for intelligence agencies and police forces. The narrative they built was that government agencies would use it to tackle terrorism, drug-trafficking, etc.
- But its first known state client — Mexico — then equipping itself with cyber-espionage tools to fight drug trafficking, went beyond the script. Forbidden Stories reported that more than 15,000 numbers were selected for targeting by Mexican agencies between 2016 and 2017.
- Among these were those of people close to then candidate Andres Manuel Lopez Obrador, now Mexican President, besides journalists, dissidents, their colleagues and family members.
- The Mexican government liked Pegasus so much it ended up equipping several of its agencies with the spyware tool: in addition to the Attorney General's office, Mexico's intelligence bureau and army were also given access. In turn NSO Group continued to provide their clients with juicier offers — each technology more sophisticated than the last.

- This catapulted NSO Group to a leader in the spy-tech industry, leaving behind then heavyweights such as European companies Hacking Team and FinFisher.
- Until then, Pegasus was utilising attack vectors such as malicious links in e-mails and SMSes. Once clicked, the link would install the spyware, giving the hacker complete access to the device without the target's knowledge. Then, it leapfrogged to "zero-click" infections.
- Such infections, used in WhatsApp and iMessage hacks, do not require any intervention from the end-user. On WhatsApp, a missed call on the voice call feature would insert a malicious code into the device. With iMessage, a short message preview did the trick.

Wider clientele
- In 2014, a US-based private investment firm, Francisco Partners, bought NSO Group for $120 million. With this, the company started focusing on finding vulnerabilities in various apps used by smartphone consumers. This also helped it earn a wider set of clients.
- A 2018 report by Canada's The Citizen Lab found suspected Pegasus infections associated with 33 of the 36 Pegasus operators it identified in 45 countries.
- The NSO Group also found itself in the crosshairs in relation to the murder of Saudi journalist Jamal Khashoggi in October 2018. Months later, in February 2019, Hulio and Lavie bought back the company from Francisco Partners with the help of Novalpina, an investment firm backed by European venture capitalists for a reported $850 million.
- At the time, Novalpina said it would ensure NSO Group's technology is used only for lawful purposes. However, little changed. In July 2020, The Citizen Lab wrote to the South Yorkshire Pensions Authority, which has invested in Novalpina, and highlighted new research showing "use of NSO Group's technology against civil society, media, human rights defenders, and political opposition members".
- A year later, Forbidden Stories, Amnesty International and 17 media partners published reports from a list of 50,000 names including journalists, opposition members, activists and even members of the administration being selected for surveillance using Pegasus.

All about the election in Pakistan Occupied Kashmir

Context: *Elections were scheduled to be held in Pakistan Occupied Kashmir (PoK) recently. The PoK Assembly has 53 seats, including four that were added in 2019. Over 700 candidates are in the fray, and there are about 20 lakh voters.*

Constitutional position
- PoK, which Pakistanis call "Azad Jammu & Kashmir" ("AJK" in short), came into being after the 1949 ceasefire between India and Pakistan after the Kashmir war, and comprises the parts of the erstwhile state of Jammu and Kashmir that were occupied by the Pakistani forces.
- Pakistan's constitutional position on PoK is that it is not a part of the country, but the "liberated" part of Kashmir. The constitution of Pakistan lists the country's four provinces — Punjab, Sind, Balochistan, and Khyber Pakhtunkhwa.
- However, Article 1 of the constitution, which lists out the territories of Pakistan, also has a provision for "such States and territories as or may be included in Pakistan, whether by accession or otherwise".
- The one direct reference to Jammu and Kashmir in Pakistan's constitution is in Article 257, which says: "When the people of the State of Jammu and Kashmir decide to accede to Pakistan, the relationship between Pakistan and the State shall be determined in accordance with the wishes of the people of that State."

In effect, central rule

- The territory of PoK comprises 10 districts under three divisions — Mirpur, Muzaffarabad, and Poonch. The capital is Muzaffarabad.

- While PoK is ostensibly an autonomous, self-governing territory, the Pakistan Army is the final arbiter on all matters Kashmir — and the security establishment exercises tight control over what goes on in PoK. At the height of the militancy in the Kashmir Valley, many of the training camps for militants were located in PoK.

- The PoK constitution has a clear injunction against persons or political parties propagating "against or taking part in activities prejudicial to the ideology of the state's accession to Pakistan". An Assembly member invites disqualification for doing this, and candidates have to sign an affidavit swearing allegiance to Kashmir's accession to Pakistan.

- For all practical purposes, PoK is run by the Pakistan government through the all-powerful Kashmir Council, a nominated 14-member body headed by the Prime Minister of Pakistan. Six members are nominated by the Pakistan government and eight are from the PoK Assembly and government, including the "prime minister" of "Azad Kashmir".

Seats and legislators

- The first direct elections in the territory were held in 1970. "AJK" got its own "interim" constitution (pending a final settlement of the Kashmir issue) in 1974, the same year that Pakistan got its first full fledged constitution.

- Forty-five of the 53 seats in the Assembly are for directly elected members — 33 are from constituencies in "AJK", while 12 are "refugee constituencies" in Pakistan's four provinces, representing those who migrated from the Indian side to Pakistan in 1947.

- The remaining eight seats in the Assembly are filled via nomination: five women, one professional, one a PoK resident settled abroad, and one from the ulema.

- The Assembly has a five-year term. The legislators elect a "prime minister" and a "president" for the territory.

In election results, a pattern

- The parties and contestants in the fray in elections in PoK mirror the politics of Pakistan. The winning party is usually the ruling party in Islamabad, and the losing side usually makes the allegation that the " agencies" — a reference to Pakistani intelligence agencies — gave the winners a helping hand.

- The last elections in PoK were held in 2016 when the Pakistan Muslim League (N) led by Nawaz Sharif was in power in Islamabad. The PML(N) won a comfortable majority, and Raja Farooq Haider was elected prime minister of "Azad Kashmir", and Masood Khan the president.

- In keeping with the pattern, it is widely expected that Imran Khan's Pakistan Tehreek-e-Insaf (PTI), which came to power in 2018, will win the PoK election.

- However, PML(N) rallies, addressed by Nawaz Sharif's daughter Maryam, have been attracting huge crowds. Bilawal Bhutto Zardari, chairman of the Pakistan People's Party, has also addressed several rallies.

Valley in the campaign

- In every election campaign, the situation in the Kashmir Valley figures prominently, although the governance record of the ruling party in Islamabad and in Muzaffarabad are also high on the list of campaign issues.

- The last election in PoK was held days after the killing of militant leader Burhan Wani by security forces in Kashmir.

- Prime Minister Nawaz Sharif, then beginning to feel the heat of the Panama Papers case and other corruption charges (he would be unseated by the judiciary a year later) held up Wani as a "martyr", denounced the alleged human rights violations by Indian forces, declared election day as a "Black Day"

in solidarity with the people of the Kashmir Valley, and pronounced his party and government's support for the "just struggle for self-determination" of Kashmiris.
- This year, the focus is on India's actions of August 5, 2019 to change the constitutional status of Jammu and Kashmir.

All about the 'Right to be Forgotten' in India

(Source: Indian Express)

Context: *Ashutosh Kaushik who won reality shows Bigg Boss in 2008 and MTV Roadies 5.0 has approached the Delhi High Court with a plea saying that his videos, photographs and articles etc. be removed from the internet citing his "Right to be Forgotten".In the plea, Kaushik also maintains that the "Right to be Forgotten" goes in sync with the "Right to Privacy", which is an integral part of Article 21 of the Constitution, which concerns the right to life.*

What is Ashutosh Kaushik's plea about?
- Kaushik's plea mentions that the posts and videos on internet related to him have caused the "petitioner psychological pain for his diminutive acts, which were erroneously committed a decade ago as the recorded videos, photos, articles of the same are available on various search engines/ online platforms".
- The plea also states that "the petitioner's mistakes in his personal life becomes and remains in public knowledge for generations to come and therefore in the instant case, this aspect acts as an ingredient for litigation before this Hon'ble court.
- Consequently, the values enshrined under Article 21 of the Indian Constitution and the emergent jurisprudential concept of the Right to be Forgotten becomes extremely relevant in the present case."
- Kaushik's plea refers to an incident from 2009 when he was held by the Mumbai traffic police for drunken driving. About ten days after Kaushik's arrest, the metropolitan magistrate court sentenced him to one-day imprisonment, imposed a fine of Rs 3,100 and also suspended his driving licence for two years.
- At the time, Kaushik was charged for drunken driving, for not wearing a helmet, for not carrying his driving licence and for not obeying the police officers who were on duty.
- The matter was heard by the single Judge bench of Justice Rekha Palli. The next hearing on this matter will be held on August 20.

So, what is the 'Right to be Forgotten' in the Indian context?
- The Right to be Forgotten falls under the purview of an individual's right to privacy, which is governed by the Personal Data Protection Bill that is yet to be passed by Parliament.
- In 2017, the Right to Privacy was declared a fundamental right by the Supreme Court in its landmark verdict.
- The court said at the time that, "the right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution".

What does the Personal Data Protection Bill say about this?
- The Personal Data Protection Bill was introduced in Lok Sabha on December 11, 2019 and it aims to set out provisions meant for the protection of the personal data of individuals.
- Clause 20 under Chapter V of this draft bill titled "Rights of Data Principal" mentions the "Right to be Forgotten." It states that the "data principal (the person to whom the data is related) shall have the right to restrict or prevent the continuing disclosure of his personal data by a data fiduciary".

- Therefore, broadly, under the Right to be forgotten, users can de-link, limit, delete or correct the disclosure of their personal information held by data fiduciaries. A data fiduciary means any person, including the State, a company, any juristic entity or any individual who alone or in conjunction with others determines the purpose and means of processing of personal data.
- Even so, the sensitivity of the personal data and information cannot be determined independently by the person concerned, but will be overseen by the Data Protection Authority (DPA). This means that while the draft bill gives some provisions under which a data principal can seek that his data be removed, but his or her rights are subject to authorisation by the Adjudicating Officer who works for the DPA.
- While assessing the data principal's request, this officer will need to examine the sensitivity of the personal data, the scale of disclosure, degree of accessibility sought to be restricted, role of the data principal in public life and the nature of the disclosure among some other variables.

Do other countries recognise this right?
- The Center for Internet and Society notes that the "right to be forgotten" gained prominence when the matter was referred to the Court of Justice of European Union (CJEC) in 2014 by a Spanish Court.
- In this case, one Mario Costeja González disputed that the Google search results for his name continued to show results leading to an auction notice of his reposed home. González said that the fact that Google continued to show these in its search results related to him was a breach of his privacy, given that the matter was resolved, the center notes.
- In the European Union (EU), the right to be forgotten empowers individuals to ask organisations to delete their personal data. It is provided by the EU's General Data Protection Regulation (GDPR), a law passed by the 28-member bloc in 2018.
- According to the EU GDPR's website, the right to be forgotten appears in Recitals 65 and 66 and in Article 17 of the regulation, which states, "The data subject shall have the right to obtain from the controller the erasure of personal data concerning him or her without undue delay and the controller shall have the obligation to erase personal data without undue delay" (if one of a number of conditions applies).
- In its landmark ruling, the EU's highest court ruled in 2019 that the 'right to be forgotten' under European law would not apply beyond the borders of EU member states. The European Court of Justice (ECJ) ruled in favour of the search engine giant Google, which was contesting a French regulatory authority's order to have web addresses removed from its global database.
- This ruling was considered an important victory for Google, and laid down that the online privacy law cannot be used to regulate the internet in countries such as India, which are outside the EU.