UPSC Daily Current Affairs| Prelim Bits 08-01-2025

Ransomware Trends in 2024

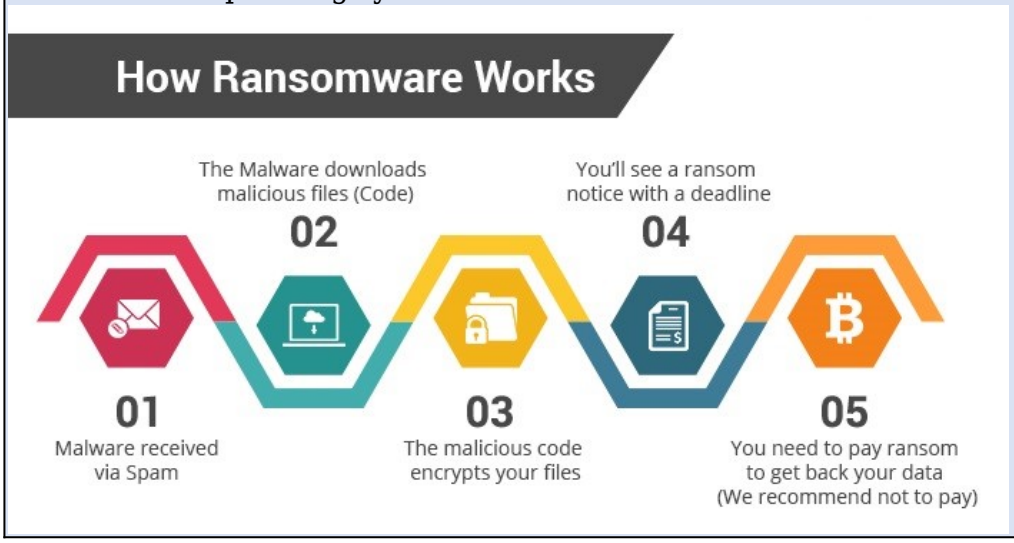
Why in News?

Recently, the CyberPeace released a report of Ransomware Trends 2024: Insights for Global Cybersecurity Readiness.

- CyberPeace used advanced *Open Source Intelligence Techniques (OSINT)*, for continuous monitoring of Ransomware Group activities.

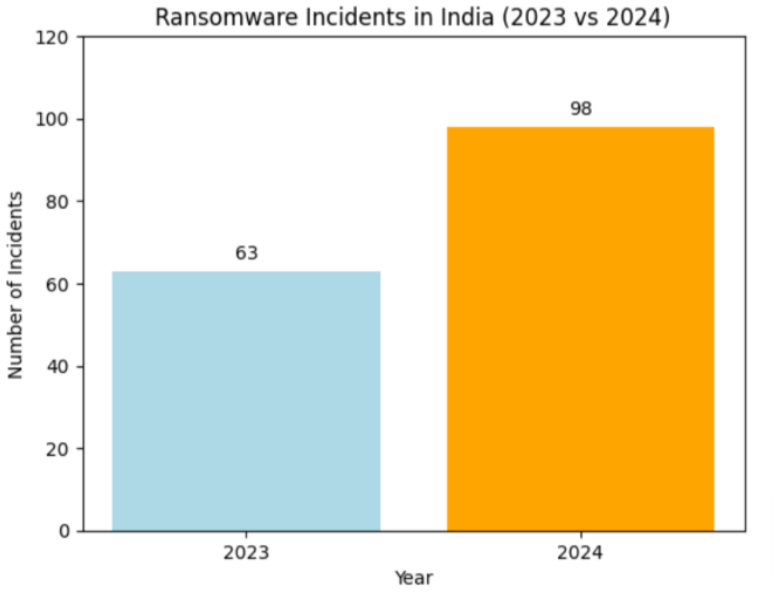
Ransomware

• It is a type of malware that *holds data and devices hostage* until a ransom is paid.
• **Encrypting ransomware** – Holds the victim's data hostage by encrypting it.
• **Non-encrypting ransomware** – Locks the victim's entire device, usually by blocking access to the operating system.



- **Threat** – Ransomware groups orchestrated 5,233 claims across 153 countries using these underground resources.
- **Most targeted nations** – United States, followed by Canada, the UK, Germany, and others.
- It revealed that *killsec was the most frequent threat*, followed by lockbit3 as the second most prominent threat.
- **Vulnerable targets** – It poses significant risks to industries, governments, and individuals alike.
- **In India** – It witnessed a *55% rise in ransomware attacks with 98 recorded cases.*
- The *industrial sector was frequently targeted*, accounting for 75% of the total incidents.
- The *government sector experienced the least impact*, with only 3% of the incidents, indicating minimal targeting compared to the other sectors.

Impacted Sectors in India	Incidents
Industrial sector	75%
Health Care center	12%
Finance sector	10%
Government sector	3%



- **Proactive Measures** – Implement Data Backup and Recovery Plans
  - Enhance Employee Awareness and Training
  - Adopt Multi-Factor Authentication (MFA)
  - Utilize Advanced Threat Detection Tools
  - Conduct Regular Vulnerability Assessments.

References

1. The Indian Express| Impact of Ransomware Attacks in India
2. CyberPeace| Ransomware Trends 2024

Related News

Increasing Ransomware Attacks in India | Ransomware attacks on Indian IT Firms

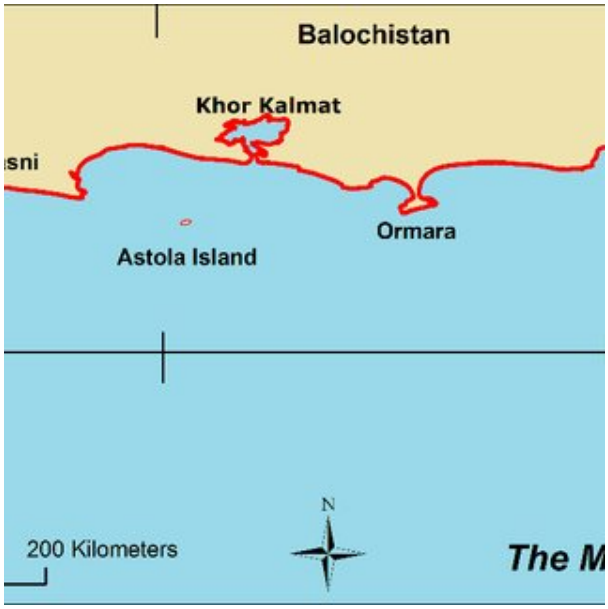
Khor Kalmat Lagoon

Why in News?

Recently, according to the U.S. Geological Survey, the aerial image of Khor Kalmat lagoon appear darker and more vibrant, like blue ink bleeding.

- **Khor Kalmat** – It is a ***tidal lagoon*** *that fully forms only at high tide*, when waters from the Arabian Sea run through a narrow channel carved into the coastline.
- At low tide, it almost completely empties, leaving behind exposed mudflats.
- **Located in** – *Makran Coast in Pakistan's Balochistan province*, around 180 miles west of Karachi.

- It is cut off from the rest of the mainland by harsh desert mountains, known as the ***Makran Coast Ridge***, which run parallel to much of the country's coast.



- **Area** – It spans around 17 miles at its widest point and includes ***Makran Coastal Range***, an arid desert mountain land.
- **Supports life** – It is home to sizable *mangrove forests*, which are an important nursery for juvenile fish, as well as other marine organisms, such as crustaceans and mollusks.
- At low tide, it provides a hunting ground for wading birds that reside in ***Buzi Makola Wildlife Sanctuary***, which lies west of lagoon.
- **Supports livelihood** – It provides timber to the few local people who live alongside the lagoon.
- **Threats** – Overfishing, deforestation of mangroves and rising temperatures driven by human-caused climate change.
- It is under threat by the potential construction of a proposed *Pakistani Naval Base*.

Reference

Livescience| Pakistan's Bleeding Ink Khor Kalmat Lagoon

Bharatpol Portal

Why in News?

Recently, the Union Home Minister inaugurated the Bharatpol portal on an occasion in New Delhi.

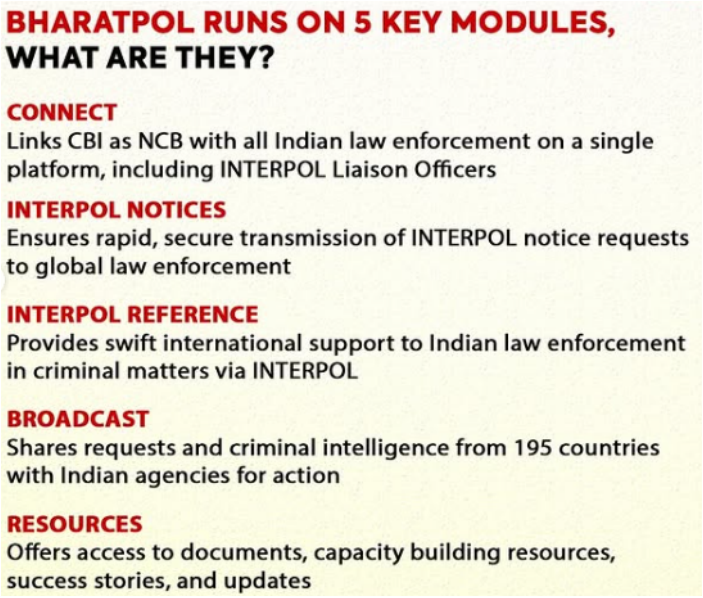
- **Bharatpol** – It is a ***broadcast hub*** for assistance and real-time action against transnational crimes via international police (INTERPOL) cooperation.
- **Developed by** – Central Bureau of Investigation (CBI).
- **Nodal Ministry** – Ministry of Home Affairs.

The CBI, as National Central Bureau for Interpol (NCB-New Delhi) in India,

connects all law enforcement agencies in India to law enforcement agencies in 195 other countries through Interpol.

- **Aim** – To ***streamline international cooperation*** for law investigating agencies.

Key Features	Key Modules
• Unified Platform • Simplified Request Mechanism • Rapid Information Dissemination • Increase utilisation of Interpol notices • Capacity Building and Training	• Connect • INTERPOL Notices • References • Broadcast • Resources



- **Importance** – Enable *cooperation with 195 INTERPOL member countries* in combating crimes related with drugs, weapons, human trafficking and other cross-border offenses.
- Introduced *trial in absentia in the 3 new criminal laws*.

Trial in Absentia *refers to conducting a criminal trial without the presence of the accused person in court.*

- Access to *19 types of databases from INTERPOL* in analyzing crimes, preventing them and apprehending criminals.
- Extends *coordination across Central, State and Union Territory* levels through INTERPOL Liaison Officers (ILOs).

References

1. The Indian Express| Launch of Bharatpol Portal
2. PIB| Bharatpol Portal

Challenges in Information Commissions

Why in News?

Recently, the Supreme Court (SC) slammed the delay shown by the Centre and States in appointing Information Commissioners.

- **Issues in CIC** – Central Information Commission (CIC) has *8 vacancies* in the posts of the Information Commissioners.
- It has *23,000 pending appeals* filed by citizens seeking information from various government departments.
- **Issues in State IC** – Several Information Commissions in States have been *defunct since 2020*.

  In Jharkhand where the lack of a Leader of Opposition (LoP) in the Vidhan Sabha was delaying appointments to the State Information Commission, which had been lying defunct since 2020 with over 8,000 appeals pending.

  *For State Information Commission, the **Appointments Committee** will be headed by the Chief Minister. Other members include the Leader of the Opposition in the Legislative Assembly and one Cabinet Minister nominated by the Chief Minister.*

- *Some have stopped accepting petitions* under the Right to Information (RTI) Act.
- **Supreme Court Direction** – It directed the Department of Personnel and Training to file an affidavit in 2 weeks specifying timelines
  - For completion of the selection process
  - For the selection committee to finalise its recommendations
  - For the notification of the appointments of the 8 Information Commissioners to the CIC.
- It also directed them to disclose the constitution of the search committee & a list of the candidates who had applied for the posts.

Central Information Commission (CIC)

- It is a ***statutory authority***.
- **Established in** – *2005*, under Section-12 of RTI Act of 2005.
- **Objectives**
  - To receive and *inquire into complaints* from any person.
  - To receive and decide upon the 2nd appeals from any citizen.
  - To perform the duty of Monitoring and Reporting.

Organizational Structure	
Composition	• Consists of Chief Information Commissioner • *Not more than 10* Information Commissioner
Appointment by	President

Selection Committee	• Chaired by – Prime Minister. • Other members – Leader of the Opposition in the Lok Sabha, or if there is no such leader, then the leader of the single largest opposition group in the Lok Sabha. • A Union Cabinet Minister nominated by PM.
Eligibility criteria	Eminent person in public life with wide knowledge and experience in • Law, science and technology, social service, management, journalism, mass media, administration and governance.

- **Powers –** It has the *same powers vested in a civil court* while trying a suit under the Code of Civil Procedure, 1908.

References

1. The Hindu| Challenges in Information Commissions
2. CIC| Central Information Commission (CIC)

Related News

RTI and Information Commissions

One Liners 08-01-2024

History, Art and Culture

Arahata Sariputra and Arahata Maudgalayana

• They are esteemed disciples of the *Lord Buddha*.
• The revered Relics of Lord Buddha, along with those of his esteemed disciples, Arhanta Sariputra and Arahanta Maudgalayana, were taken to Thailand for 26-day exposition.

Oman Collection

• **Launched in** – May 2024.
• **Launched by** – National Archives of India (NAI).
• The Oman Collection is the first overseas digitization project by the NAI, aimed at *preserving the historical records of the Indian community in Oman*.
• **Document digitalization** – The project digitized over 7,000 documents from private collections of prominent Indian families, many of whom have been settled in Oman for over 250 years.

Geography

Mountain ranges in Africa

• Reduced fog due to increased temperatures are among the climatic changes that affects the mountain regions of Africa.

Mountain Regions	***Countries***
Kilimanjaro & Udzungwa	Tanzania
Kigezi	Uganda
Mount Kenya & Aberdare	Kenya
Itombwe	Democratic Republic of the Congo
Nyungwe	Rwanda

Social Issues

School students enrolment

• According to the *Unified District Information System for Education Plus (UDISE+)*, the total enrolment of students in schools across India studying from grade 1-12, *dropped by over a crore* in 2023-24 as compared to 2018-19.

Agriculture

Fruits Farmer Registration & Unified Beneficiary Information System (FRUITS)

• An initiative of *Karnataka* Government.
• It is a *software* which facilitates *single registration* using an Aadhar card and state's Bhoomi digitised land record system for authenticating ownership.
• In Karnataka, through FRUITS software, farmers can access benefits of schemes such as cash incentives under PM Kisan, payment for Minimum Support Price For crops and so on.

Environment

Banded Royal butterfly (Rachana Jalindra Indra)

• **Sepahijala Wildlife Sanctuary** – It has been recently spotted at the Sepahijala Wildlife Sanctuary in *Tripura*'s Sepahijala district.
• It is a rare butterfly species in the State.
• **Protection** – It is legally protected under Schedule 2 of the Wildlife Act, 1972.

Turtle Guardians initiative

• It was announced on June 25 during the budget session of the *Tamil Nadu* State Assembly.
• **Aim** – To collect data on sea turtle nesting, and for wildlife enthusiasts to receive information on hatchling releases.
• **5 species of marine turtles in Tamil Nadu coastline** – Olive Ridley, Green, Leatherback, Hawksbill, and Loggerhead turtles.

Green Mahakumbh

• It brings together more than 1,000 environmental and water conservation workers from across the country.
• **Aim** – To make Prayagraj clean, healthy and disciplined.
• **Part of** – Gyan Mahakumbh - 2081 series.
• **Organized by** – Shiksha Sanskriti Utthan Nyas.
• **Chief Patron** – CM of Uttar Pradesh.
• **Activity** – A national-level discussion will focus on issues related to nature, the environment, water and cleanliness.
• The Swachhata Rath Yatra was launched in Prayagraj to promote cleanliness and raise public awareness, drawing significant community participation.

Security

Advanced Light Helicopter (ALH)-DHRUV

• ALH-DHRUV is an *indigenously developed* utility aircraft by Hindustan Aeronautics Limited (HAL) with a *twin-engine*.
• It has a multi-role, multi-mission dimension to it.

BHARATPOL portal

• **Developed by** – *Central Bureau of Investigation (CBI)*.
• This portal will streamline all requests for international assistance through INTERPOL, including the issuance of Red Notices and other color-coded INTERPOL notices.

Science

Genome-scale metabolic models (GEMs)

• Genome-scale metabolic models (GEMs) are *mathematical models* that represent the relationship between an organism's genotype and phenotype.
• They are used to study the metabolism of organisms and predict cellular states.



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