

# DISTRIBUTED DENIAL OF SERVICE ATTACK : SCIENCE & TECHNOLOGY

**NEWS:** *What's a DDoS cyberattack that hit Karnataka's Kaveri 2.0 portal?*

## WHAT'S IN THE NEWS?

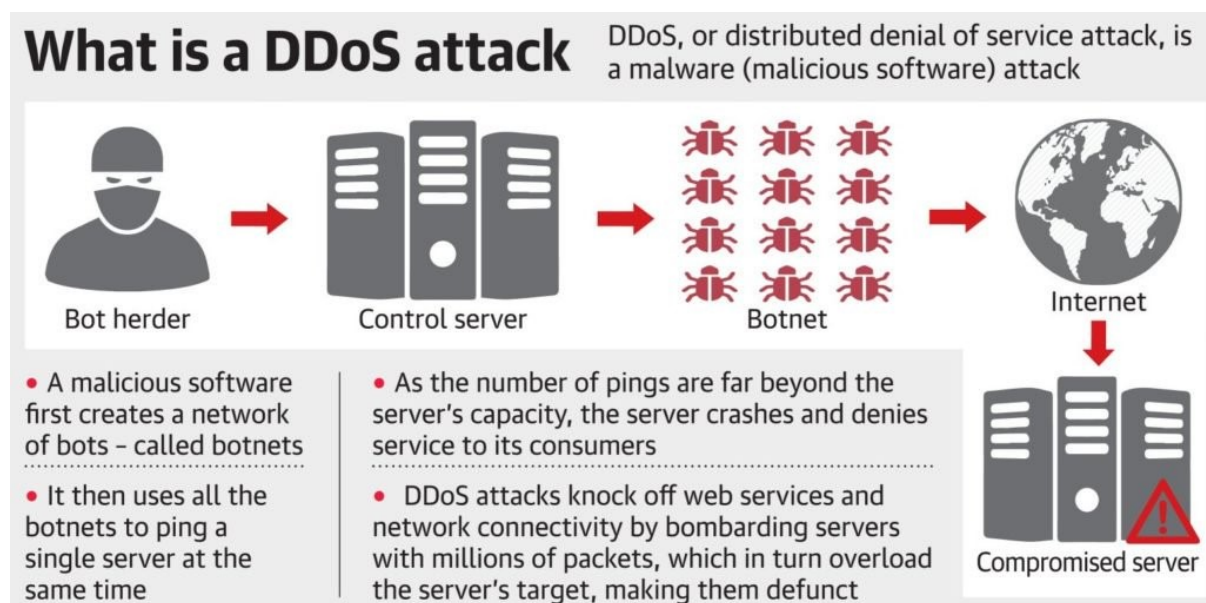
**Introduction to the Incident** In January 2025, the Kaveri 2.0 portal, Karnataka's revamped platform for property registrations, experienced significant disruptions due to a Distributed Denial of Service (DDoS) attack. This attack utilized automated tools or bots, leading to the creation of fake accounts and entries that overwhelmed the system.

## Understanding DDoS Attacks

- **Definition:** A DDoS attack aims to disrupt the normal functioning of a targeted server, service, or network by flooding it with excessive internet traffic.
- **Mechanism:** Unlike single-source Denial of Service (DoS) attacks, DDoS attacks involve multiple compromised devices, known as a botnet, which are used to generate massive amounts of traffic.
- **Target and Tactics:** These attacks can saturate a website's bandwidth, exploit network protocol vulnerabilities, or target specific application weaknesses.

## Implications of DDoS Attacks

- **Service Disruption:** Such attacks can cause significant downtime, rendering essential services unavailable and potentially leading to loss of revenue.
- **Secondary Attacks:** Often, DDoS attacks serve as a distraction for more invasive cyber attacks like data breaches.
- **Reputational Damage:** Organizations suffering from DDoS attacks may face reputational harm as stakeholders lose trust in their ability to safeguard against cyber threats.
- **Financial Impact:** The downtime associated with DDoS attacks can result in substantial financial losses, particularly for online-based businesses and services.



## Mitigation Strategies

- **Traffic Filtering:** Implementing advanced traffic filtering can help distinguish between legitimate and malicious data packets.
- **Traffic Monitoring:** Utilizing monitoring tools can aid in identifying and mitigating unusual traffic patterns swiftly.
- **Rate Limiting:** This involves setting a cap on the number of requests a user can make within a certain time frame to prevent overload.
- **Bot Detection:** Technologies such as CAPTCHA and behavioral analysis help in detecting and blocking bots.
- **Security Audits:** Regular security checks and robust authentication methods are crucial to enhance the security frameworks of online portals.

## Kaveri 2.0 Portal Details

- **Purpose and Launch:** Launched in 2023, Kaveri 2.0 is Karnataka's initiative to streamline the land registration process through a digital platform.
- **Features:** This portal provides users with access to critical information regarding stamp duties, property guidelines, and simplifies the data entry process for registrations, aiming for a quicker and more transparent property registration experience.

The DDoS attack on Kaveri 2.0 underscores the critical need for robust cybersecurity measures, especially for government-operated digital services, to protect against and mitigate the effects of such cyber threats.

**Source:** <https://www.thehindu.com/sci-tech/technology/whats-a-ddos-cyberattack-that-hit-karnatakas-kaveri-20-portal/article69228797.ece>