

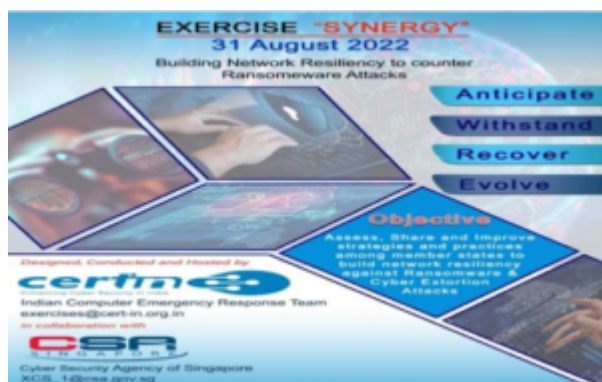
# Cyber Security Exercise “Synergy”

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**In news**– CERT-In under Ministry of Electronics & IT, in collaboration with Cyber Security Agency of Singapore (CSA), has successfully conducted the Cyber Security Exercise “Synergy”.

## About the Exercise-

- It was conducted for 13 countries **as part of the International Counter Ransomware Initiative- Resilience Working Group** which is being led by India under the leadership of National Security Council Secretariat(NSCS).
- **The theme of the exercise was** “Building Network Resiliency to Counter Ransomware Attacks”.
- The exercise scenario was derived from real life cyber incidents, in which a domestic level (limited impact) ransomware incident escalates to a global cyber security crisis.
- Exercise “Synergy” was hosted by CERT-In on its exercise simulation platform.



- **Each State participated as a National Crisis Management Team** having composition from different government agencies including National CERTs/CSIRTs, Law

Enforcement Agencies (LEA), Communication & IT/ICT Ministry and Security agencies.

- The specific **objective of the exercise was to Assess, Share and Improve strategies** and practices among Member-States to build network resiliency against ransomware & cyber extortion attacks.

### What is Ransomware?

- Ransomware is a type of malicious software, or malware, that prevents you from accessing your computer files, systems, or networks and demands you pay a ransom for their return.
- Ransomware attacks can cause costly disruptions to operations and the loss of critical information and data.

### Examples of Ransomware-

#### WannaCry:

- **A powerful Microsoft exploit was leveraged to create a worldwide ransomware** worm that infected over 250,000 systems before a kill switch was tripped to stop its spread.

#### CryptoLocker:

- This was **one of the first of the current generation of ransomware** that required cryptocurrency for payment (Bitcoin) and encrypted a user's hard drive and attached network drives.
- **Cryptolocker was spread via an email** with an attachment that claimed to be FedEx and UPS tracking notifications.

#### NotPetya:

- **Considered one of the most damaging ransomware attacks,** NotPetya leveraged tactics from its namesake, Petya,

such as **infecting and encrypting the master boot** record of a Microsoft Windows-based system.

- NotPetya leveraged the same vulnerability from WannaCry to spread rapidly, demanding payment in bitcoin to undo the changes.
- **It has been classified by some as a wiper, since NotPetya cannot undo its changes** to the master boot record and renders the target system unrecoverable.

### Bad Rabbit:

- Considered a cousin of NotPetya and using similar code and exploits to spread, Bad Rabbit was a visible ransomware that appeared to target Russia and Ukraine, mostly impacting media companies there.
- Unlike NotPetya, **Bad Rabbit did allow for decryption if the ransom** was paid.
- The majority of cases indicate that it was spread via a fake Flash player update that can impact users via a drive by attack.

### REvil:

- **REvil is authored by a group of financially motivated attackers.**
- It exfiltrated data before it encrypts it so that targeted victims can be blackmailed into paying if they choose not to send the ransom.
- The attack **stemmed from compromised IT management software used to patch Windows and Mac** infrastructure.
- Attackers compromised the Kaseya software used to inject the REvil ransomware onto corporate systems.

### Ryuk:

- **Ryuk is a manually distributed ransomware application** mainly used in spear-phishing. Targets are carefully chosen using reconnaissance.
- **Email messages are sent to chosen victims**, and all files

hosted on the infected system are then encr.