

Ransomware - WannaCry

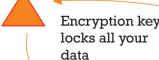




You receive an infected file (typically attached to an email or a URL); if you open it, you've let malicious code into your computer

> When you try to open a file, a message appears demanding a ransom

Payment in cryptocurrency bitcoin helps hackers cover their tracks





Without the key, all the files on your computer are locked



In a matter of minutes, your files are out of reach

Command and control server



Your encrypted files are lost

- You send the ransom money to an anonymous recipient hiding in the 'Darknet'
- Normally, you get the key to the data in an hour or so

WHAT IS RANSOMWARE

- The malware shutting down computers worldwide is known as WannaCry and variants of that name
- This type of malware is called ransomware as it first scrambles a victim's files and then demands a payment to unscramble them

HOW DOES IT WORK

- WannaCry seems to be deployed via a worm — a programme that spread by itself between computers
- Once malware is inside an organisation, it will find vulnerable machines and infect them too
- Infections reported in 150 countries, including Russia and China. In UK, hospital systems badly hit

HOW THE HACKERS STRUCK

- The ransomware exploits a weakness in Microsoft Windows systems that was identified by the US National Security Agency and given the name 'EternalBlue'
- ❖ But NSA's code was among a cache stolen by a hackers' group known as The Shadow Brokers, who then attempted to sell it in an online auction
- The hackers' group later made the tools freely available in April, saying it was a "protest" against US President Donald Tump
- Microsoft had by then already released a software upgrade fixing the issue
- But not all users were prompt in installing the upgrades

GOVT AGENCIES/COMPANIES AFFECTED GLOBALLY

- Britain's National Health Service (NHS)
- Russian interior ministry (about 1,000 computers)
- Spain's communications giant Telefonica
- Spain's power firm Iberdrola
- FedEx in the US
- Japanese carmaker Nissan's plant in England
- German rail operator Deutsche Bahn
- French automaker Renault halted production at several sites in Europe

- Cyber extortionists tricked victims into opening malicious attachments to spam emails that appeared to contain legitimate files
- The ransomware encrypted data on the computers, demanding payments of \$300 to \$600 via the digital currency bitcoin to restore

GLOBAL IMPACT

- A cyber security firm said it had seen 2,00,000 cases of the Wanna Cry attack
- Asian nations also hit hard by the ransomware

