



Cyber Threats experienced across the World, India and Uttarakhand 2010 to 2014

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Abstract: Cyber threats have been identified and reported around the globe. This is because the people who are using Internet are not delimiting themselves to use Internet only in their geographic region. And the cyber criminals are also not targeting any specific country or region in particular. Moreover these threats have now become more and more personalized in terms of geography, culture, language etc. As soon as somebody types a domain name or initiates a search on any search platform, a series of events occur and the person is shown many relevant results depending upon the search engine's relevancy criteria. These results do not show any geographic boundary; hence any end user is unaware that from which country this information is coming to him or her. Also students extensively make use of Internet nowadays worldwide in order to gain knowledge, do their class work or home work and then utilize this information and wisdom they have gained for doing their class works/ home works/ making projects or applications etc.

Keywords: Cyber Threats, Cyber Security, Cyber Threats prevailing in Uttarakhand, Cyber threat Counter Measure Practices.

I- Introduction

The potential risks of cyber threats lie in diverse domains, which can be seen as Cyber Terrorism, Cyber war and Other Cyber Threats (Lewis, 2002). When we see the world we can see these three potential threats (Cyber Terrorism, Cyber war and Other Cyber Threats) that can occur. Cyber war as we can understand is carried out by conjuring up images, information warriors, unleashing vicious attacks against an unsuspecting opponent's computer network. On a larger scale as of a Nation or State it can be seen as a major cruel attack of creating chaos and paralyzing the defence and/or utility system simultaneously of any country or state. It becomes a chaotic scenario all of a sudden.



II- Cyber Threats at a glance

Assessing the cyber threats has four elements as a whole (Lewis, 2002) which are of the following kinds:-

a. We should first of all collect the cyber-warfare and cyber terrorism in the historical context of attacks against infrastructure.

b. We should look at the cyber attacks which have been near to an environment of routine infrastructure failure. Such data is already available to work upon which includes data on power outages, flight delays and communications disruptions. Although these can be said as routine failures but they can be used to understand and take a lesson from, the effect of vulnerabilities in a system which can lead to cyber-warfare and cyber-terrorism.

c. We need to measure the dependence of infrastructure of any Country/ State on network of computers. This type of dependence can measure the dependence of infrastructure on redundancy already present in such systems.

d. For the case of cyber-terrorism, we can make use of cyber-weapons in the real perspective of the political goals and such motives of terrorists. It must also be kept in minds that these are cyber-weapons capable enough of achieving these goals?

As the world is witnessing cyber threats and cyber attacks so is India. India consists of 28 states and 8 Union Territories; each of them has been facing cyber treats in one way or the other.

Uttarakhand is not left untouched with the penetration of Internet. Being a newly formed state and with the day by day penetration of Internet towards urban and rural areas in the state, such study of the residents of the state towards being informed about, various prevailing cyber threats and the practices to counter measure them, is the need of the hour.

III- Cyber Threats Witnessed globally for a period of half a decade

In the Year 2010:

1. More than 300K complaints of consumers of fraud and scams were received by FBI. [1]
2. Kaspersky Lab had reported more than 500 Million Cyber Attacks Against Users. [2]

**In the Year 2011:**

1. In 2011, the Washington Post reported that U.S. intelligence organizations carried out 231 cyber-operations under a campaign of cyber warfare. [3]
2. FBI received more than 300K complaints of consumers related to frauds and scams. [4]
3. Kaspersky had reported the number of cyber attacks they detected increased to more than 90 Million in 2011. [5]

In the Year 2012:

1. Department of Homeland Security of United States (DHS) reported that the cyber attacks on critical infrastructure have increased in 2012. [6]
2. Kaspersky Labs reported Nearly 1.6 Billion Web-based attacks. [7]
3. Botnets were discovered in nearly 700K infected Apple computers. [8]

In the Year 2013:

1. The stock markets fell suddenly by \$136 Billion due to a social media cyber attack. [9]
2. 3 Billion Yahoo accounts were hacked in a massive data breach. [10]
3. Kaspersky reported that cyber attacks surpassed 1.7 Billion. [11]

In the Year 2014:

1. IBM reported that nearly two-thirds of cyber attacks were focused on three industries: finance and insurance, information and communications, and manufacturing. [12]
2. FBI received more than 250K Complaints of frauds. [13]
3. Kaspersky labs reported more than 1.4 Billion attacks. [14]

IV- Cyber Threats Witnessed by India for a period of half a decade**In the Year 2010:**

1. CBI website was hacked by hackers in 2010.



2. In Varanasi bomb blast case of 2010, which was also executed with the help of E-Communication.

In the Year 2011:

1. Norton Cyber Crime reported that India suffered a loss of approximately \$8 billion due to cyber crime in 2011. [15]
2. India's national airline Air India said that a cyber-attack on its data servers affected about 4.5 million customers around the world. [16]

In the Year 2012:

1. 10,000 Indian government and military emails hacked. [17]
2. In June 2012, cyber attacks were reported on the Indian Navy's Eastern Command systems. [18]

In the Year 2013:

1. Indian companies lost around \$4 billion due to cyber attacks in 2013. [19]

In the Year 2014:

1. India ranked 2nd in cyber attacks through social media in 2014: Symantec report says India saw 6% of social media scams globally in 2014. [20]
2. In 2014 Gujarat-based Rs, 1,500 cr BSE listed, Deepak Nitrite was surprised when one of its regular customers based in the US, didn't pay even after receiving a consignment. When the company asked the customer about the payment, they were told that the payment was made to a new account in Malaysia. The client had received an email from Deepak Nitrate's official id just earlier informing it of a change in bank account details. Deepak Nitrite had neither changed the bank account nor communicated any such thing to its customer. [21]

V- Cyber Threats Witnessed by Uttarakhand for a period of half a decade

In the Year 2010: Total number of Incidences related to cyber crimes registered during 2010 are: 10. [22]



In the Year 2011: Total number of Incidences related to cyber crimes registered during 2011 are: 6. [23]

In the Year 2012: Total number of Incidences related to cyber crimes registered during 2012 are: 4. [24]

In the Year 2013: Total number of Incidences related to cyber crimes registered during 2013 are: 23. [25]

In the Year 2014: Total number of Incidences related to cyber crimes registered during 2014 are: 42. [26]

VI- CONCLUSION

Cyber threats are faced by the people worldwide, without any exception. It is therefore necessary for the Internet users to take care of themselves while being online because they are always at a risk of being a victim to a cyber threat. Using a genuine antivirus can be possibly one of the measures that people can adopt along with other measures like using firewall, surfing safe links only, not responding to lottery/ winning money e-mails etc.

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